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ABSTRACT

The last several years have seen a growing resolve among educators and policymakers to assure the place of a solid arts education in U.S. schools. In 1997, the National Assessment of Educational Progress (NAEP) conducted a national assessment in the arts at grade 8. The assessment included the areas of music, theater, and visual arts. For each of these arts areas, this Report Card describes the achievement of eighth graders within the general population and in various subgroups. Taken with the information provided about instructional and institutional variables, this report gives a context for evaluating the status of students' learning in the arts. The arts assessment was designed to measure the content specifications described in the arts framework for NAEP. The arts have a unique capacity to integrate intellect, emotions, and physical skills in the creation of meaning. Meaningful arts assessments need to be built around three arts processes: creating, performing, and responding. To capture these processes, the arts assessment exercises included authentic tasks that assessed students' knowledge and skills and constructed-response and multiple choice questions that explore students' abilities to describe, analyze, interpret, and evaluate works of art in written form. Data are reported in overall summaries for creating, performing, and responding in terms of student- and school-reported background variables. Student results for theater are discussed in terms of teacher-reported background variables as well. The major findings of the assessment are that a large percentage of grade 8 students attend schools in which music and visual arts were taught usually by specialists; most students attended schools in which instruction following district or state curricula was offered in music and visual arts, but not in theater or dance; and most visual arts and music instruction took place in school facilities that were dedicated to that subject. (JH)

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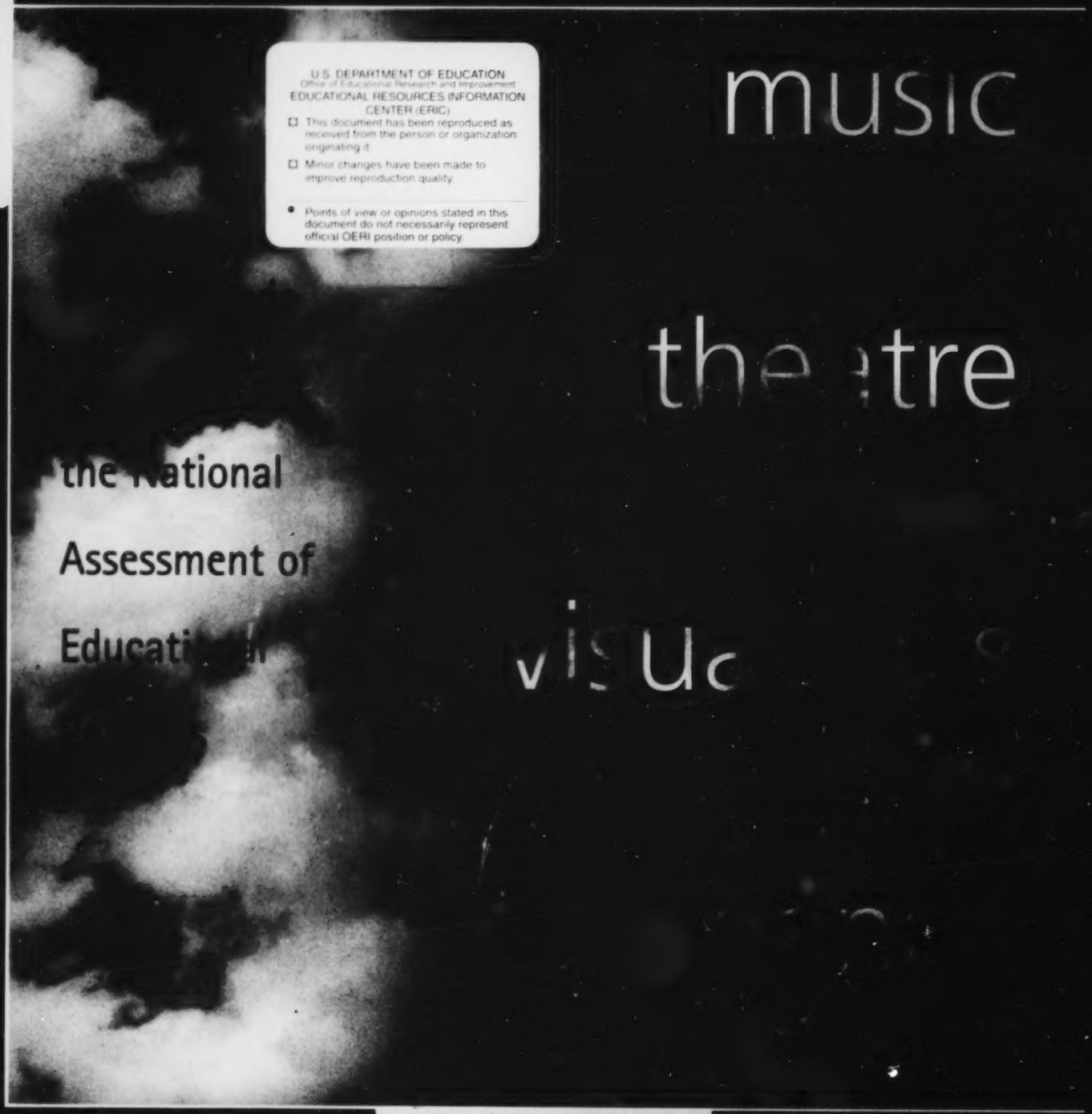

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The NAEP 1997 Arts Report Card

Eighth-Grade Findings from the National Assessment of Educational Progress

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U.S. Department of Education
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Executive Summary

The last several years have seen a growing resolve among educators and policymakers to assure the place of a solid arts education in the nation's schools. There are many reasons for this resolve, but certainly among the most important is the contribution the arts make to the quality of education. As stated in the *Improving America's Schools Act of 1994*, "The Congress finds that the arts are forms of understanding and ways of knowing that are fundamentally important to education."[1]

For over 25 years, the National Assessment of Educational Progress (NAEP) has reported on the knowledge and skills of children in the United States. If policymakers, educators, and concerned citizens are to reform and improve the United States educational system to ensure that students receive a solid arts education, they need valid and reliable information about the arts skills and abilities of our nation's students. As the nation's only ongoing survey of students' educational progress, NAEP is an important resource for understanding what students know and can do. NAEP assessments have explored students' abilities in a range of subject areas, including reading, science, U.S. history, and mathematics. Based on assessment results, NAEP reports levels of student achievement and the instructional, institutional, and demographic variables associated with those levels of achievement.

In 1997, NAEP conducted a national assessment in the arts at grade 8. The assessment included the areas of music, theatre, and visual arts. (Though an assessment was developed for dance, it was not implemented because a statistically suitable sample could not be located.) For each of these arts areas, this *Report Card* describes the achievement of eighth graders within the general population and in various subgroups. Taken with the information provided about instructional and institutional variables, this report gives readers a context for evaluating the status of students' learning in the arts.

Readers should note that this report is intended to be read with a CD-ROM. The CD features the complete text of the report, as well as many more examples of student responses to assessment exercises.

The NAEP Arts Education Assessment Framework

The arts assessment was designed to measure the content specifications described in the arts framework for the National Assessment of Educational Progress. The central principle underlying the arts framework is that dance, music, theatre, and visual arts are crucial components of a complete education. The arts have a unique capacity to integrate intellect, emotions, and physical skills in the creation of meaning. Further, (according to the framework), at its best, the teaching of the arts will emphasize Creating and Performing works of art as well as studying and analyzing existing works. Thus, meaningful arts assessments should be built around three arts processes: Creating, Performing, and Responding.

- **Creating** refers to expressing ideas and feelings in the form of an original work of art, for example, a dance, a piece of music, a dramatic improvisation, or a sculpture.
- **Performing** refers to performing an existing work, a process that calls upon the interpretive or re-creative skills of the student.
- **Responding** refers to observing, describing, analyzing, and evaluating works of art.

In order to capture the processes of Creating, Performing, and Responding, the arts assessment exercises included the following:

- Authentic tasks that assessed students' knowledge and skills in Creating and Performing music and theatre, and Creating in visual arts. Among other activities, students were to sing, create music, create and perform dances, act in theatrical improvisations, and work with various media to create works of visual art. Students were also to evaluate their own work in written form.
- Constructed-response and multiple-choice questions that explored students' abilities to describe, analyze, interpret, and evaluate works of art in written form.

1 *Improving America's Schools Act of 1994*. H.R. 6, 103rd Cong., 2nd Sess. (1994).

The Arts Assessment Student Samples

The NAEP 1997 Arts Assessment was conducted nationally at grade 8.[2] For music and visual arts, representative samples of public and nonpublic school students were assessed. A special sample was assessed for theatre.

The decision to assess a special sample of students for theatre was made based on the results of the 1995 NAEP field tests in all four arts at grades 4 and 8. Field test data indicated that small percentages of students were exposed to comprehensive theatre programs in the nation's schools. (Eleven percent of students that were part of the random sample taking the 1997 visual arts assessment had some exposure to theatre education.)

To ensure rich results about what students who have been exposed to theatre in school know and can do, the National Center for Education Statistics (NCES), the National Assessment Governing Board (NAGB), members of the arts community, and Educational Testing Service (ETS) decided that a "targeted" sample of students should take the theatre assessment. Schools offering at least 44 classroom hours of a theatre course per semester, and offering courses including more than the history or literature of theatre, were identified. Students attending those schools who had accumulated 30 hours of theatre classes by the end of the 1996-97 school year were selected to take the theatre assessment.

In this *Report Card*, discussions of student performance on the theatre assessment refer to this special sample of students, not to the nationally representative sample of students who took the music and visual arts assessment.

Also based on the results of the 1995 arts field test, a decision was made to have a targeted sample of students take the dance assessment. (Results from the 1997 arts assessment indicate that 3 percent of students in the national random sample received dance instruction in school three or four times a week.) The NAEP staff responsible for drawing NAEP samples and obtaining participation worked with the arts community to set criteria for the dance student sample and then to locate schools offering comprehensive dance programs.[3] However, after considerable effort, a sample suitable in size and national distribution could not be found.

So that readers will have a picture of the performance assessment in dance that was developed based on the arts framework, the dance exercises that were intended for administration to students are included in this *Report Card.* (Appendix A contains information on sample sizes and participation rates for the assessment.)

Student Achievement

In this report, student performance on the arts assessment is presented in several ways. Overall summaries of results for Creating, Performing, and Responding in terms of student- and school-reported background variables are featured. For theatre, student results are also discussed in terms of teacher-reported background variables.[4]

The overall summaries of results deal with Creating, Performing, and Responding separately. Responding results within music, theatre, and visual arts are grouped for summarization on three NAEP arts Responding scales, each of which ranges from 0 to 300. Average Responding scale score results are presented by demographic and "opportunity to learn" variables (such as frequency of arts instruction, arts

2 The arts assessment was administered at grade 8 only because, due to budget constraints, NAEP could not comprehensively assess the arts at all three grade levels. (This shortfall also affected other NAEP subjects, such as math and science.) The arts community was consulted widely and recommended that the assessment be administered at one grade, grade 8. In this way, a full assessment of the Arts Framework, with authentic Creating, Performing, and Responding exercises, could be administered in the different arts.

3 Students who would have taken the dance assessment attended schools that offered at least 17 classroom hours of a dance course per semester. These students would have to have been currently enrolled in dance classes, or would have to have taken dance coursework in the last year. Coursework needed to include more than dance in athletic contexts, for example, dancersize or dance team, and more than aesthetics or criticism.

4 A teacher questionnaire was administered only for the theatre assessment because of the special nature of the theatre sample. Students who took the music and visual arts assessments were a random national sample. These students attended schools where music and visual arts may be taught by itinerant teachers or part-time staff. By contrast, those who took the theatre assessment attended schools that featured theatre as a substantial part of the curricula. This increased the chance of teacher response to the questionnaire.

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facilities, and classroom activities in the arts) based on student-, school-, and, in the case of theatre, teacher-reported background information. Creating and Performing results are not summarized using a standard NAEP scale. Instead of a scale, Creating and Performing results are presented as average percents of the maximum possible score on exercises, in relation to demographic and opportunity-to-learn variables. (These average scores represent the overall mean percentage students earned of the possible number of points for the components of Creating and Performing tasks.)

Major Findings in Music, Theatre, and Visual Arts for the Nation

Music

- *Responding.* Most students could select appropriate functional uses for different types of music and could partially justify their choices in writing. For example, 79 percent of students could identify an excerpt from Brahms' "Lullaby" as being suitable for putting a child to sleep and could provide some justification for their choice.
- *Responding.* Students showed some skills in critiquing simple music performances. For example, 45 percent of students were able to identify and describe two errors, and 16 percent of students were able to identify and describe three errors in a performance of "Michael Row the Boat Ashore."
- *Creating.* Students showed limited abilities in creating music. When asked to create a rhythmic embellishment based on the first two phrases of "Ode to Joy," 24 percent of students were able to perform music that was scored "Adequate" or above in overall appeal and interest.
- *Performing.* Students' singing abilities across various aspects of musical performance were mixed. When singing the song "America" with a taped accompaniment, 78 percent of students were able to sing the rhythms of the melody with generally acceptable rhythmic ensemble and accuracy. In contrast, 35 percent of the students sang almost all of the pitches of the melody accurately, and 24 percent sang with a tone quality considered appropriate in most sections of the music.

Theatre

- *Responding.* More students could describe feelings conveyed by actors in dramatic performances, or what actors did with their faces, voices, or bodies, than could explain how actors used their faces, voices, and bodies to convey character and feeling. For example, 41 percent of students could describe the voice used by an actor in a radio play. Fourteen percent were able to describe ways the actor's voice conveyed his character.
- *Responding.* Students showed some knowledge of the technical elements of theatre. Sixty-five percent of students could offer reasonably accurate plans for how to create lighting effects for a scene in a Carson McCullers play. Fifty percent were able to draw ground plans for a set of that scene that showed some understanding of a theatre space. Seventeen percent of students were able to draw complete and essentially error-free ground plans.
- *Creating/Performing.* Students' abilities to combine dialogue, action, and expression to communicate meaning to an audience varied across Creating/Performing tasks. Sixty-seven percent of students demonstrated this ability most of the time in an improvisational task, and 2 percent did all the time. In a cold reading of a script, 30 percent of students demonstrated the ability to convey meaning (if only generally) most of the time, and 6 percent did all the time.

Visual Arts

- *Responding.* Some students were able to accurately describe some aspects of artworks. For example, 29 percent of students could describe three ways Raphael created a sense of near and far in a Madonna and Child painting.
- *Responding.* Students' abilities to place artworks in historical or cultural contexts varied. For example, 55 percent of students could identify which of four works was a work of contemporary Western art, and 25 percent could identify which of four works contributed to Cubism.

- *Responding.* Generally, linking aesthetic features of artworks explicitly with meaning seemed challenging for students. Four percent of students could write a brief essay linking a full analysis of technical aspects of a Schiele self-portrait to an interpretation, while 24 percent were able either to link sparser technical analyses to interpretations or to analyze technical aspects without an interpretation.
- *Creating.* Students showed some ability to create specific, fully observed, and expressive two-dimensional artworks. One percent of students created expressive collages that showed a consistent awareness of qualities such as color, texture, and contrast. However, 42 percent were able to effectively use collage techniques in parts of their collages.
- *Creating.* Students seemed to find applying their knowledge and skills to three-dimensional tasks challenging. For example, 3 percent of students were able to create freestanding sculptures out of plasticine and wire that skillfully combined shapes, details, and textures into an imaginative interpretation of kitchen utensils. Many more students (21 percent) created sculptures that were not freestanding, or showed some ability to realize an idea in an inventive, organized interpretation.

Major Findings for Students and Arts Learning in the Nation's Schools

- A large percentage of grade 8 students attended schools in which music and visual arts were taught, in most cases by full-time or part-time specialists. Student access to theatre and dance instruction was more limited.
- Most students attended schools in which instruction following district or state curricula was offered in the subjects of music and visual arts, but not in theatre or dance.
- Most visual arts and music instruction took place in school facilities dedicated to that subject. Where available, dance was usually taught in gymnasiums. Where available, theatre instruction usually took place on a stage or in a room dedicated to theatre teaching.

Major Creating, Performing, and Responding Findings for Student Subgroups

- In the NAEP arts assessment, females consistently outperformed their male peers.
- White and (where sample sizes were large enough) Asian students had higher average scores in Creating, Performing, and Responding than did Black or Hispanic students in some instances. However, music Creating scores of Black and White students were comparable, as were music Creating and Performing scores among Black, Hispanic, and Asian students.
- Consistent with past NAEP assessments, higher levels of parental education were associated with higher levels of student performance in the arts assessment.[5]

Cautions in Interpretations

The reader is cautioned against interpreting the relationships among subgroup averages or percentages as causal relationships. Average performance differences between two groups of students may result in part from socioeconomic and other factors. For example, differences among racial/ethnic subgroups are almost certainly associated with a broad range of socioeconomic and educational factors not discussed in this report.

Additionally, readers should avoid making comparisons in scores across arts areas. The scales in each subject are independent, and the same score in two arts areas may not mean the same things in terms of student achievement.

Finally, readers should note that NAEP administered assessments in music and visual arts in 1974 and 1978. However, the assessment results for 1997 examined in this report are not comparable with the results from the earlier assessments, because of considerable changes in the nature of the 1997 assessment, based on the recently created *Arts Education Assessment Framework.*

5 Note that the student samples for music and visual arts differed from the theatre sample. While students who took the music and visual arts assessments were a random national sample, those that took the theatre assessment were selected from students who had some theatre education.

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A Note About the Field Test Process Report

There is much to be learned from the process of developing, administering, and scoring an innovative performance assessment in the arts intended for a national sample. This information could not be accommodated in this *Report Card*. In order to share this information with the public, NAEP will be creating a report detailing the creation, administration, and scoring of the 1995 and 1997 arts field tests. (In 1995, NAEP field tested dance, music, theatre, and visual arts at grades 4 and 8. In 1997, NAEP field tested those four subjects at grade 12.) The forthcoming *1995 and 1997 Arts Field Test Process Report* will also include examples of exercises and student work. This will enable readers curious about measuring student performance at grades 4 and 12 and about measuring performance in dance to learn about the methods used in those field tests.[6]

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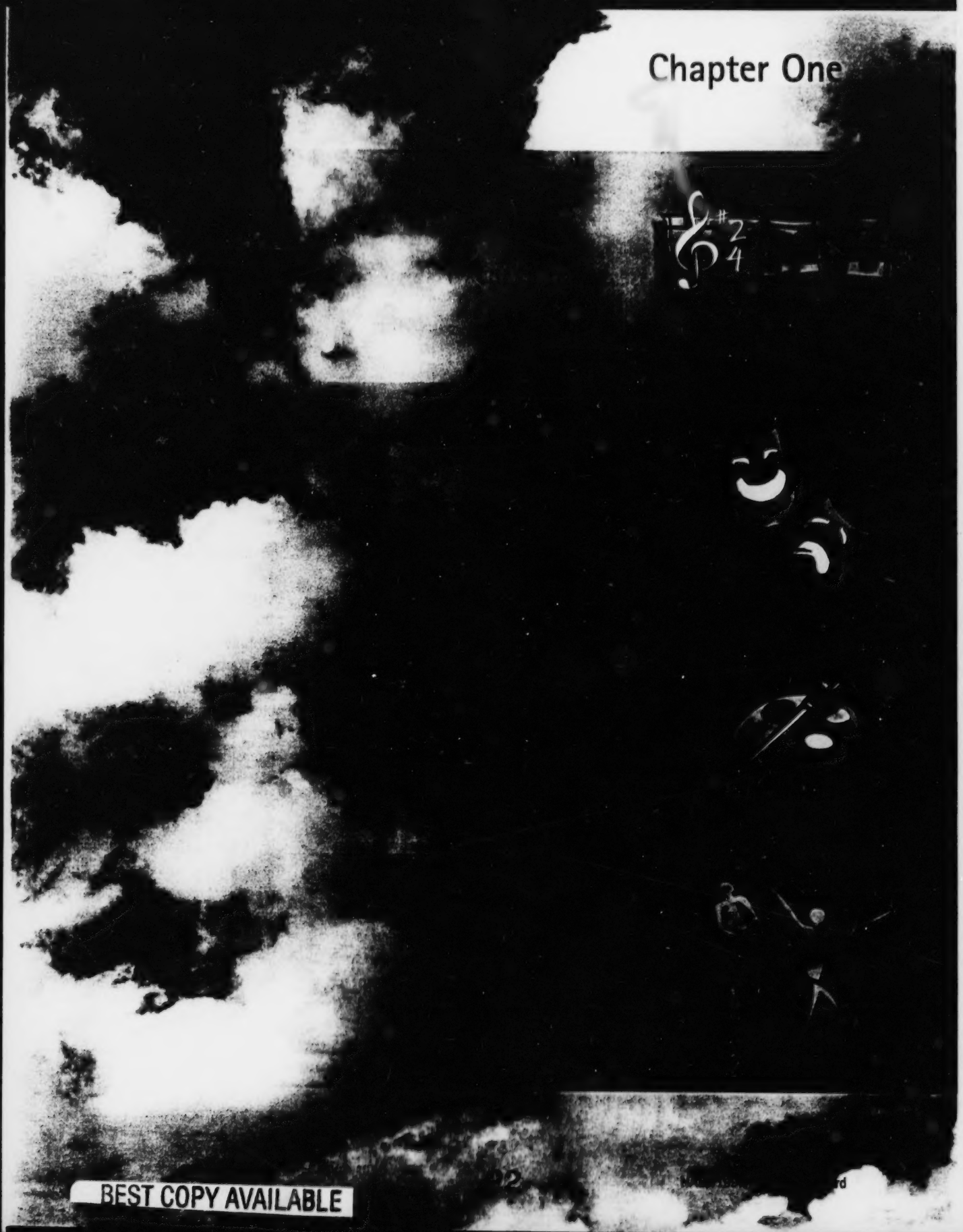
6 Additionally, most items created for both the 1995 and 1997 arts field tests and the grade 8 arts assessment will be released for public use in 1999. Teachers, students, and other members of the general public will have computer Web access to assessment exercises, scoring guides, and sample responses. However, dance videos, music audio, artworks, and theatre performances used as stimuli for exercises may not be available on the Web, due to copyright restrictions.



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When we teach a child to sing or play an instrument, we teach her to listen. When we teach a child to draw, we teach her to see. When we teach a child to dance, we teach him about body and about space. When we teach a child design, we teach the geometry of the world.

– Jane Alexander
Former Chair, National Endowment for the Arts

Chapter One

The NAEP 1997 Assessment in the Arts

Introduction

The last several years have seen a growing resolve among educators and policymakers to assure the place of a solid arts education in the nation's schools. There are many reasons for this resolve, but certainly among the most important is the contribution the arts make to the quality of education. As stated in the *Improving America's Schools Act of 1994*, "The Congress finds that the arts are forms of understanding and ways of knowing that are fundamentally important to education."[1] What are these ways of understanding and knowing? They are eloquently expressed in the words of Jane Alexander quoted above. As a means of encountering the world around us, the arts offer a unique combination of intellectual, emotional, imaginative, and physical experiences. Musical sounds, the gestures of a dancing body, colors in a painting, the emotion visible on the face of an actor: all of these are alternative languages. They are opportunities for capturing ideas and feelings, for communicating, for learning, that move well beyond words.

The arts as a means of expression are especially important in the context of current educational reform that emphasizes "multiple intelligences."[2] Children learn in many different ways. The range of artistic experiences offers visual, kinetic, aural, and spatial means of teaching and learning. The arts' capacity to reach many kinds of students may account for evidence that arts learning improves student performance in diverse subjects.[3]

According to a study performed at the University of California at Irvine, early education in classical keyboard increased students' aptitude for math and science.[4] College Board data indicate that students who have engaged in sequential arts programs perform significantly better on both the verbal and math components of the SAT than their peers who have not.[5]

Until further study can explain with precision how arts improve student learning, it is worth considering that, in the words of one artist, "the study of art is a means of personal expression that is important to well-being."[6] Learning to use different senses, make choices, benefit from mistakes, work with others, and to be imaginative, mentally flexible, and playful are important educational experiences that translate into skills indispensable in a rapidly changing world. Workplaces are likely to demand increasing abilities to solve problems, generate new ideas, and make independent choices. The arts encourage these skills. Another dimension of change is the increasing connectedness among peoples and cultures. Learning about artistic expressions from all over the world is an important means of introducing young people to the diversity and shared experiences of humanity.

1 *Improving America's Schools Act of 1994*. H.R. 6, 103rd Cong., 2nd Sess. (1994).

2 Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.

3 Kane, E. and Frankonis, E. (1998, May). Arts education in the new millennium. *Education New York*, 2(5), 3.

4 Ibid.

5 Childress, J. (1998, May). Art education pays off. *Education New York*, 2(5), 5.

6 EDNY interviews artist Sylvia Plimack Mangold [Q and A]. (1998, May). *Education New York*, 2(5), 14.

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NAEP's Mission

The National Assessment of Educational Progress (NAEP) is the only nationally representative and continuing assessment of what students in the United States know and can do in various subjects. NAEP is authorized by Congress and directed by the National Center for Education Statistics (NCES) of the U.S. Department of Education. The National Assessment Governing Board (NAGB), an independent body, provides policy direction for NAEP.

Since its inception in 1969, NAEP's mission has been to collect, analyze, and produce valid and reliable information about the performance of students in the United States in various subject areas. NAEP has become a valuable tool in tracking progress toward the National Education Goals.

The purpose of this report is to inform educators, policymakers, and the public about student achievement in the arts.

Readers should be aware that NAEP administered assessments in music and visual arts in 1974 and 1978. The assessment results for 1997 examined in this report are not comparable with the results from the earlier assessments because of considerable changes in the nature of the 1997 assessment, based on the recently created *Arts Education Assessment Framework.*

The NAEP Arts Education Assessment Framework

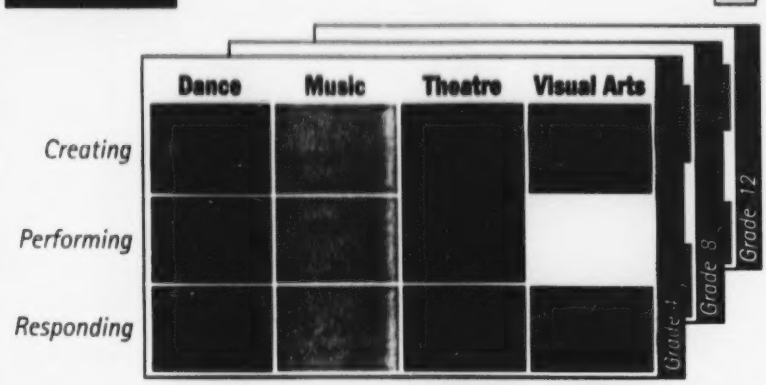
The 1997 arts assessment was designed according to specifications described in the NAEP *Arts Education Assessment Framework.* The framework was developed between 1992 and 1994 through a consensus process involving arts educators, artists, policymakers, representatives from the business community, assessment specialists, and members of the public. The project was managed by the Council of Chief State School Officers under the auspices of NAGB.

The central principles underlying the arts framework are that a complete and rich arts education is a crucial part of the curriculum, and that such an education must emphasize creating and performing as much as studying and analyzing works of art. Thus, mirroring a solid arts education, a strong arts assessment should be built around the three arts processes of Creating, Performing, and Responding.

Figure 1.1 illustrates the framework's vision of how Creating, Performing, and Responding are parts of arts education and assessment. In dance and music, the processes of Creating, Performing, and Responding are all emphasized, although music educators have typically placed greater emphasis on performance of existing works and students' responses to performances. In theatre, Creating and Performing are understood as a combined act, and the responses of the audience, director, actors, and designers are seen as important components of the development of Creating/Performing work. In visual arts, creative expression and responses to artworks are more highly valued than the performance, or duplication, of existing works.

The figure also expresses the idea that in dance, music, theatre, and visual arts, students' arts knowledge and skills apply in equally important ways to the processes of Creating, Performing, and Responding.

Figure 1.1 **The Framework Matrix**



Based on Specific Content in the Arts Disciplines

Knowledge and Skills

Although the matrix applies to grades 4, 8, and 12, only grade 8 was administered as an assessment.

Table 1.1 below gives a further visual representation of how both knowledge and skills are important for the processes of Creating, Performing, and Responding. Table 1.1 describes the two major components of arts learning according to the assessment framework. Students should gain (1) knowledge and understanding about the arts, including the personal, social, cultural, and historical contexts for works, and (2) perceptual, intellectual/reflective, expressive, and technical skills. Both of these components are found in dance, music, theatre, and visual arts.

As represented in the left-hand column of the table, when students engage in Creating, Performing, and Responding, they draw upon many kinds of knowledge and understanding about the arts in order to create meaning. Students need to be able to place the arts in broader contexts to appreciate their significance. For example, a student studying a collage by Romare Bearden would benefit from some understanding of African American history. A personal perspective, a knowledge of how the arts fit into the students' immediate society and broader culture, and an historical perspective are all important elements of arts learning.

Students also need knowledge of aesthetics to understand the varied ideas about the nature, meaning, and value of the arts held by peoples from many cultures and historical periods. When creating a dance composition based on an abstract idea like metamorphosis, for example, a grasp of how contemporary choreographers experiment with elements like space and movement would be helpful for students.

Finally, students need to know and understand the different forms of artistic expression and the technical processes by which these forms can be created. For example, when creating the effect of a thunderstorm on stage for a play by Carson McCullers, students would need to know how to use sound and lighting effects to communicate the storm to an audience.

The acquiring and application of skills determine the quality of Creating, Performing, and Responding in the arts (see the right-hand column of the table). Perceptual skills are needed to collect sensory stimuli and to discern subtleties. For example, musicians must be able to hear pitches and rhythms to be able to perform correctly. Intellectual/Reflective skills are needed to test different creative possibilities, solve artistic problems, refine work, and deepen artistic experience and thought. Expressive skills are needed to add a unique and personal nature to works of art: a Bach keyboard suite played without expression would fail to move an audience. Technical skills are needed to produce works of quality. Without an ability to manipulate materials correctly, an artist would not be able to create a sculpture that stands upright.

Of great importance to the creators of the assessment framework is the idea that throughout the processes of Creating, Performing, and Responding, students utilize and apply knowledge and skills simultaneously. Knowledge and skills rarely function in isolation. It is difficult to master an artistic skill in the absence of relevant knowledge. Similarly, students use their

Table 1.1 **Knowledge and Skills Based On Specific Content from Dance, Music, Theatre, and Visual Arts**

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Knowledge of Creating, Performing, Responding	Skills in Creating, Performing, Responding
Applying Knowledge of:	Applying Cognitive, Affective, and Motor Skills Including:
Context: • personal • social • cultural • historical	Perceptual
Aesthetics	Intellectual/Reflective
Form and Structure	Expressive
Processes	Technical

knowledge of aesthetics and history as they Create, Perform, or Respond. Often, more knowledge is gained as students actively engage in artistic processes.

In order to measure the application of knowledge and skills to Creating, Performing, and Responding, the framework called for the arts assessment to include the following kinds of exercises:

- Authentic tasks that assess students' knowledge and skills in Creating and Performing music and theatre and in Creating in visual arts. Among other activities, students were to sing, create music, create and perform dances, act in theatrical improvisations, and work with various media to create works of visual art. Students were also to evaluate their own work in written form.
- Constructed-response (questions that require students to create a response in written or other form) and multiple-choice questions that explore students' abilities to apply knowledge and skills in Responding to works of art. These questions asked students to analyze, describe, and identify important qualities of works.

Developing exercises to meet the requirements of the arts framework posed interesting challenges. In educational settings, students and teachers of the arts can discuss the range of choices available to students to communicate meaning, and students can work on their projects over time. This is not the case in a timed assessment. To give students as much of an opportunity as possible to demonstrate their arts knowledge and skills, it was necessary to create contexts for the assessment exercises. This was done in two important ways. First, while taking care not to "overteach" students, and hence damage assessment results, instructions for Creating, Performing, and Responding tasks were carefully crafted to lead students through complex exercises step by step, and to give students as much information as possible about what knowledge and skills they were being asked to demonstrate. In this way, the arts assessment avoided asking students to Create, Perform, or Respond in a conceptual vacuum. Second, as much as possible, exercises were built around a theme or particular work of art, so that students could focus on just a single work or issue. This gave students the opportunity to think more deeply about the assessment tasks, and ensured that students were not asked isolated questions about unrelated works of art.

The Assessment Design

Independent sets of exercises were developed for each discipline that was assessed: music, theatre, and visual arts.[7] Within each art, there were four "blocks" (groups of exercises administered as separate units to be completed in a set time frame) of written Responding exercises, and three Creating and/or Performing blocks. (In theatre, Creating and Performing constitute one category, and visual arts do not include the process of Performing.) The music assessment also featured two additional Creating/Performing blocks designed for students who indicated that they were currently involved in some musical activity.

Each student who participated in the assessment was assessed in one of the three arts, to ensure that sufficiently in-depth information about students' arts abilities was gathered. In the first portion of the assessment, each student received one booklet containing two blocks of cognitive Responding exercises and three blocks of background questions. The cognitive blocks included multiple-choice questions and two types of constructed-response questions: short constructed-response questions that required students to write answers of a few words or sentences, and extended constructed-response questions that required students to provide answers of a paragraph or more. (In visual arts, three of the Responding blocks included two-dimensional Creating tasks.) Answers to the constructed-response questions

7 As noted in the Executive Summary of this report, an attempt was made to find a sample of students attending schools that have a solid dance curriculum for participation in the grade 8 dance assessment. Since dance is usually not part of schools' curricula, a sample of a statistically suitable size could not be found. Therefore, NAEP did not assess grade 8 students in dance.

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were evaluated using multi-level scoring guides that defined criteria for full credit, partial credit, or no credit. The background questions asked students to provide information about their demographic characteristics, arts classroom instruction, and self-perceptions about their abilities in the art form in which they were being assessed.

In the second portion of the assessment, each student completed one Creating and/or Performing block. (Again, the exception is music. Students who were currently engaged in some type of musical activity took two Creating and/or Performing blocks, one for the general student sample and one for students with special music knowledge.) No background questions were asked during this part of the assessment.

Separating the more active portions of the assessment allowed for a suitable amount of time to be devoted to these complex tasks. It also allowed for numerous special conditions that had to be met to successfully administer Creating and/or Performing tasks. Among these were the need to have students work in pairs or groups for theatre improvisations; the need to videotape students acting; the need to set up instruments and recording devices for music tasks; the complications associated with distributing large amounts of visual arts materials; the time needed to photograph three-dimensional visual art works for future scoring; and in general, special space requirements for all three arts.

Taken together, the Responding, Creating, and Performing portions of the assessment, and the background questionnaires, make it possible to analyze and compare the performances of various subgroups of students. A more extensive discussion of the content of the assessment and of the various student, (theatre) teacher, and school questionnaires is presented in Appendix A.

The Arts Assessment Student Samples

The NAEP 1997 arts assessment was conducted nationally at grade 8.[8] For music and visual arts, representative samples of public and nonpublic school students were assessed.

The theatre sample was a "targeted" sample. Schools offering at least 44 classroom hours of a theatre course per semester, and offering courses including more than the history or literature of theatre, were identified. Students attending these schools who had accumulated 30 hours of theatre classes by the end of the 1996-97 school year were selected to take the theatre assessment. The sample of nonpublic schools for theatre was not large enough to permit the separate reporting of nonpublic school results for this discipline. (Appendix A contains information on sample sizes and participation rates for the assessment.)

Evaluating Students' Work in the Arts

One of the greatest challenges of the arts assessment was scoring student works of art. While the arts have a long tradition of judging student works, a national assessment posed new difficulties. Among these were how to apply precise criteria to student works that demonstrated a wide range of abilities. Another was how to train large numbers of raters to apply these criteria appropriately in scoring.

Both challenges were largely met by hiring experienced teachers in each of the arts to train raters to apply suitable criteria. In the case of theatre, methods were borrowed from actual educational practice; teams of two or three raters discussed student performances before assigning scores.

A fuller description of scoring methods is included in Appendix A. Greater detail about how those methods were developed and applied will be featured in the forthcoming *1995 and 1997 Arts Field Test Process Report.* For the purposes of this *Report Card,* readers are asked to keep in mind the inevitable diversity of views involved in scoring student works of art as they encounter decisions made by raters during the course of the assessment scoring.

8 The arts assessment was administered at grade 8 only because, due to budget constraints, NAEP could not comprehensively assess the arts at all three grade levels. (This shortfall also affected other NAEP subjects, such as math and science.) The arts community was consulted widely and recommended that the assessment be administered at one grade, grade 8. In this way, a full assessment of the Arts Framework, with authentic Creating, Performing, and Responding exercises, could be administered in the different arts.

Reporting NAEP Arts Results

Student performance on the arts assessment is presented in several ways in this report. Overall summaries of Creating, Performing, and Responding results and their relationships to student- and school-reported background variables are featured. For theatre, relationships between student results and teacher-reported background variables are also presented.[9]

Results for Creating, Performing, and Responding are summarized separately in each arts area because at least some students may be stronger in one process than another.[10] As stated earlier, while the knowledge and skills students draw upon to Respond to, Perform, and Create works of art do overlap and inform one another, it is plausible that some students will create or perform but not respond well, and vice versa.

Responding results within music, theatre, and visual arts are grouped for summarization on three NAEP arts Responding scales, each of which ranges from 0 to 300. Creating and Performing results are not summarized on a standard NAEP scale. To scale assessment results, there must be a sufficient number of students taking a given group of exercises, and a sufficient number of exercises to be scaled of a given type. This was not the case for the Creating and Performing exercises in any of the three arts assessed. Although they consumed far more assessment time than written exercises, there were fewer exercises to group together into a scale. Moreover, given the complex administrative procedures associated with these tasks (such as videotaping responses, distributing arts materials, and having students work in groups), each student took only one such task.[11] This prohibited the use of the kind of scaling methodology used to summarize Responding results. Instead of a scale, Creating and Performing results are presented in terms of an average percent of the maximum possible score.

Finally, the arts assessment results are not able to be reported in terms of the NAEP achievement levels (basic, proficient, and advanced). The complex, diverse nature of the assessment tasks in each arts discipline resulted in different scales for Creating, Performing, and Responding. Therefore, results could not be summarized for each arts discipline for the purpose of setting achievement levels.

Interpreting NAEP Results

This report examines and compares the arts performance of groups of students defined by demographic characteristics (e.g., males compared to females) or by responses to background questionnaires regarding experience in a given arts area. It does not explore the relationships among combinations of these groups (e.g., White males compared to Black males). Appendix A presents detailed descriptions of the reporting subgroups.

The averages and percentages presented in the report are estimates because they are based on samples rather than on all members of each population. Consequently, the results are subject to a measure of uncertainty, reflected in the standard errors of the estimates. The comparisons made in the report are based on statistical tests that consider the magnitude of the differences between the group averages or percentages and the standard errors of those statistics. Throughout this report, differences among reporting groups are defined as "significant" when they are significant from a statistical perspective. The discussion of a difference as statistically significant means that observed differences in the sample are likely to reflect real differences in the population and are highly unlikely to have resulted from chance factors associated with sampling variability.[12] The term "significant," therefore, is not intended to imply a

9 A teacher questionnaire was used only for theatre, because the special targeted nature of the theatre sample considerably increased the chances of getting responses from theatre teachers.

10 Furthermore, a measurement requirement for summarizing student responses to different exercises together is that those exercises measure the same or similar knowledge and skills. The range of arts knowledge and skills is very wide. Knowledge and skills are also related in subtle and various ways in their applications to Creating, Performing, and Responding. These factors diminish the possibility that the three processes, in strict measurement terms, utilize knowledge and skills in ways similar enough to be summarized on a single scale. However, overall Creating, Performing, and Responding results are presented side by side wherever possible.

11 A small proportion of students currently involved in some type of musical activity at the time of the assessment received two music Creating and/or Performing tasks.

12 All differences reported are statistically significant at the .05 level with appropriate adjustments for multiple comparisons.

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judgment about the educational relevance of the differences. It is, rather, intended to identify statistically dependable population differences to help focus subsequent discussion among policymakers, educators, and the public.

This report also contains appendices that support or supplement the results presented. Appendix A contains an overview of the NAEP arts framework and specifications, information about assessment design, scoring, and the sample, and a detailed description of the major reporting subgroups featured in Chapter 6. Appendix B presents the standard errors for the tables presented in this report.

Cautions in Interpretations

The reader is cautioned against interpreting the relationships among subgroup averages or percentages as causal relationships. Average performance differences between two groups of students may result in part from socioeconomic and other factors. For example, differences among racial/ethnic subgroups are almost certainly associated with a broad range of socioeconomic and educational factors not discussed in this report. Similarly, differences in performance between public and nonpublic school students may be better understood by accounting for other factors such as the composition of the student body, parents' education levels, and parental involvement.

Additionally, readers should avoid making comparisons in scores across arts areas. The assessment exercises and performance tasks in each area were independently developed. No explicit efforts were undertaken to match the difficulty level or scope of coverage of the assessments across the different arts areas. Furthermore, the scales in each content area are independently derived, and the same score in two areas may not represent the same level of student achievement. Consequently, comparisons of average scores across content areas are not inherently meaningful.

About This Report

This *Report Card* is organized as follows. This chapter, Chapter 1, presents the overview of the NAEP 1997 Arts Assessment: its content framework, design, student sample, administration, and scoring. Chapter 2 presents an in-depth look at the music component of the assessment. Assessment questions and student responses are examined, as are average student results for Creating, Performing, and Responding. Chapters 3 and 4 do the same for theatre and visual arts, respectively (visual arts does not include the process of Performing). Chapter 5 features the dance exercises intended for the grade 8 dance assessment.[13] Chapter 6 presents average results in music, theatre, and visual arts for the nation and subgroups of students. Finally, Chapter 7 describes contextual factors related to students' arts achievement, such as frequency of arts instruction and school arts facilities.

Readers should note that this report is intended to be read with a CD-ROM. The CD features the complete text of the report, as well as many more examples of student responses to assessment exercises.

13 Due to an insufficient number of schools with comprehensive dance programs, this portion of the assessment did not take place. The exercises are included to provide a picture of the authentic performance assessment developed for dance. For samples of student responses to dance field test exercises, see the forthcoming *1995 and 1997 Arts Field Test Process Report*.

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Chapter Two

Creating, Performing, and Responding in Music: A Close Look at the NAEP 1997 Music Assessment

The Content of the Music Assessment

School music programs have had a long history in American public schools. From humble beginnings, music education in the United States has grown in districts throughout the nation to reflect a wide diversity of course offerings, methodologies, and approaches to instruction. With the passage of the *National Goals 2000: Educate America Act*,[1] music, along with the other arts, has taken its place as a core subject to be taught and assessed in the nation's schools. An important part of this legislation included provisions for establishing voluntary national educational standards in the arts that were "internationally competitive," "[reflected] the best knowledge about teaching and learning," and were developed using a "broad-based, open adoption process."[2]

Through an extensive development and consensus-building process involving appropriate representation from arts agencies, arts educators, government, and the general public, the voluntary *National Standards for Arts Education* were subsequently created.[3] The purpose of the *Standards* is to provide explicit detail about what American students should know and be able to do in the arts, including music. Embedded in the *Standards* for music is the idea that all students should demonstrate mastery of core knowledge and abilities in music, regardless of the mode of instruction in the music classroom. The *Standards*, while designed as voluntary guidelines, have proved to be a valuable reference for music educators who develop and revise curricula and set standards at the state and district levels.

Just as music curricula and standards throughout the nation continue to be re-examined and refined, so have assessment practices in music and the other arts. Among education researchers, there has been an increased call for "authentic assessment" exercises that more closely reflect experiences that students have as they learn and engage in classroom activities in various school subjects.[4] Developers of the *Framework* for the NAEP music assessment adopted the philosophy of authentic assessment to describe how students' skills in music should be measured and evaluated. Specifically, they defined what students should be asked to do in order to demonstrate their abilities to create, perform, and respond to music. For example, the *Framework* specified that students should be asked both to generate written descriptions and responses to music, and to perform and create music to demonstrate their skills. Thus, the assessment placed far less emphasis on traditional multiple-choice questions than did previous generations of music assessments.

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1 *National Goals 2000: Educate America Act* (1994). Pub. L. No. 102-227.

2 *National Standards for Arts Education* (1994). Reston, Virginia: Music Educators National Conference, 11.

3 *National Standards for Arts Education* (1994). Reston, Virginia: Music Educators National Conference.

4 Wiggins, G. P. (1993). *Assessing student performance*. San Francisco: Jossey-Bass.

Inherent in the vision of authentic assessment in music is the idea of asking students to evaluate the choices they make as they create and perform, just as musicians do when creating new works or when learning to perform new repertoire.

The NAEP 1997 arts assessment was designed in conjunction with the newly developed voluntary *National Standards for Arts Education*. The nine content standards for music articulated in the *Standards* document were grouped into three general themes in the NAEP *Framework*: *Creating* music (such as composing, improvising, and arranging activities), *Responding* to music (analyzing and evaluating music and performances, listening with understanding, and demonstrating knowledge of music in relation to the other arts and to history and culture), and *Performing* (singing or playing instruments).

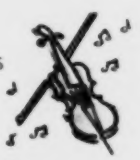
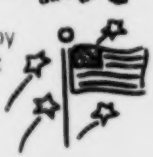
Creating tasks gave the students the opportunity to create a rhythmic improvisation, create a harmonic improvisation, create an embellishment on a familiar tune, use the process of improvisation to create an original melody, and evaluate their work. In addition, some students currently participating in a musical activity were asked to create improvisations in jazz style. To demonstrate their *Performing* abilities, students were asked to play familiar tunes by ear on a MIDI keyboard and to sing a familiar tune with accompaniment. Additional exercises conducted with some students enrolled in musical activities included sight-reading a short melody, practicing and performing an excerpt of a large ensemble piece for their instrument or voice, and evaluating their work. As a part of the assessment, some students enrolled in music activities were asked to bring and perform samples of music that they had learned in school or out of school. While *Responding* to music in the assessment, students analyzed and described aspects of music they heard, critiqued instrumental and vocal performances, demonstrated their facility with standard music notation, and demonstrated their knowledge of the role of music in society.

Creating the music assessment posed many challenges. Throughout the assessment it was necessary to strike a balance between the need to cover rigorous content outlines and the need to make tasks and questions accessible to students of all levels of ability and experience. Performing and Creating tasks needed to be administered with efficiencies of time, yet maintain the authenticity to the art form called for throughout the arts assessment. As is discussed in the *Framework*, music assessment exercises needed to be designed and selected with the knowledge that there is no "canon" of universally taught musical repertoire in our nation.[5] Finally, music tasks and assessment questions needed to cover broad content areas while using stimulus materials that reflected a diverse range of musical genres, styles, and performance mediums.

An overview of the grade 8 music assessment "blocks" (groups of exercises administered as separate units to be completed in a set time frame) is presented in Figure 2.1. As the detailed discussions of the different blocks later in this chapter will make clear, a wide variety of cultures, genres, and historical periods are represented by the works to which students were asked to respond. The first seven blocks described were administered to a random sample of students selected from the general student population. The final two blocks described were administered only to a subsample of students who indicated that they were currently involved in some type of musical activity in school or out of school.

5 National Assessment Governing Board. (1994). *Arts education assessment framework* (pre-publication ed.). Washington, DC: Author, 44. Available online at http://www.nagb.org

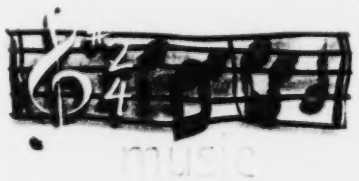
Figure 2.1 The Content Description of the NAEP Music Assessment

Block Name	
"Shalom, My Friends" (Responding Block)	Students discussed features of an example of Japanese koto music. Students analyzed features of a choral arrangement of the song "Shalom, My Friends" and Scott Joplin's "Pine Apple Rag." Students contrasted stylistic elements present in excerpts of music from Brahms' First Symphony with two pieces by composer Ellen Taaffe Zwilich.
"Musical Texture" (Responding Block)	Students analyzed textural elements of excerpts of music from a flute solo by Chaminade, a fugue by J.S. Bach, and a Native American flute solo. Students analyzed and compared two different versions of "Why Do the Nations So Furiously Rage?" (One version of the music was by G.F. Handel and the other was a jazz performance by Al Jarreau.) Students analyzed form and other features of an African dance song and a Japanese folk song.
"Michael Row the Boat Ashore" (Responding Block)	Students demonstrated understanding of phrase structure, instrumentation, and melodic contour of a performance of the folk song "Au Clair de la Lune." Students answered questions dealing with standard melodic and rhythmic music notation. Students provided a critique of a vocal performance of "Michael Row the Boat Ashore." Students analyzed functional uses and stylistic features of excerpts from Sousa's "The Washington Post March," Brahms' "Lullaby," and the spiritual "Wade in the Water."
"Minuet in G" (Responding Block)	Students provided a critique of a violin performance of "Minuet in G" by J.S. Bach, described features and answered questions about excerpts of string quartet music by George Crumb, "Rhapsody in Blue" by George Gershwin, and the W. Schuman arrangement of Charles Ives' "Variations on America." 
"'The Lion Sleeps Tonight'/'Twinkle, Twinkle, Little Star'" (Creating and Performing Block)	Students improvised a rhythmic accompaniment and a harmonic accompaniment for an instrumental arrangement of the popular tune "The Lion Sleeps Tonight." Students performed the melody "Twinkle, Twinkle, Little Star" by ear on the MIDI keyboard.
"'Ode to Joy'/ Sing 'America'" (Creating and Performing Block)	Students performed the first two phrases of the melody "Ode to Joy" by ear on the MIDI keyboard. Students created a rhythmic embellishment based on the first two phrases of the tune "Ode to Joy." Students sang the melody to the song "America" ("My Country 'Tis of Thee") along with a full chorus accompaniment on audiotape. 
"Rock Improvisation and Evaluation" (Creating Block)	Students performed improvisations to a rock music background and created an original melody. Students sang a vocal improvisation with the rock background music. Students answered self-evaluation questions about their performances.
"Jazz Improvisation and Melodic Sight-Reading" (Creating and Performing Block)	Students performed a solo of their choice. Students performed two brief jazz improvisations on their instrument or voice. Students sight-read an eight-measure melody on their instrument or voice.
"Large Ensemble" (Performing Block)	Students performed a solo of their choice. Students performed an excerpt from a large ensemble piece along with a full ensemble accompaniment recorded on audiotape. Students listened to their performance and then answered self-evaluation questions about their singing or playing.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Sample Responding and Creating/Performing Blocks and Exercises

In Parts 1 and 3 of this chapter, the different components of the music assessment are examined to show what students know and can do when they are asked to Create, Perform, and Respond in music. Figures 2.2–2.5 and 2.10–2.14 describe the questions and exercises administered to students. Each figure features either an entire music block or selected exercises from a block. The figures demonstrate how the exercises were organized and presented to students and describe how well students performed on the exercises. Many sample student responses are shown, in order to give a detailed picture of the range of student abilities encountered in the assessment. Percentages of students choosing each of the various options for multiple-choice questions, or at the different levels for constructed-response questions or performing tasks, are also featured. In Part 1 of this chapter, sample Responding block questions and student responses are illustrated. Part 2 presents the Music Responding Scale and Item Map. In addition, Part 2 provides data showing the relationship between student proficiency in Music Responding and student background variables, and the relationships between student proficiency in Music Creating, Performing and Responding. Part 3 describes the Music Creating and Performing blocks and provides student responses to those exercises. Part 4 examines the relationships between student proficiency in Music Creating and Performing and selected student and school variables.



Part One

Sample Questions from the Music Responding Blocks

For each of the Responding blocks in the NAEP music assessment, trained test administrators played paced audiotapes that provided standardized directions and musical examples for test questions. The tapes allowed students appropriate time after hearing the music to answer each question. Each student completed two of the four Responding blocks. All of these blocks were administered to full classes of students. The total number of questions in each block ranged from 8 to 16. The amount of time needed to administer the individual blocks of questions ranged from approximately 25 to 35 minutes.

Selected representative Responding block items and student responses follow. Almost all of the items in the block "Michael Row the Boat Ashore" (Figure 2.4) have been included in order to demonstrate the format and design of a typical Responding block.

Figure 2.2 **Sample Questions and Student Responses from the "Shalom, My Friends" Block are found on the CD-ROM version of this report.**

Figure 2.3 **Sample Questions and Student Responses from the "Musical Texture" Block are found on the CD-ROM version of this report.**

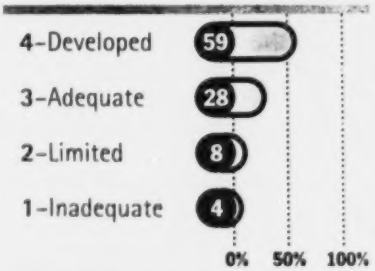
Figure 2.4 **Sample Questions and Student Responses from the "Michael Row the Boat Ashore" Block (This figure can also be found on the CD-ROM version of this report.)**

THE NATION'S REPORT CARD NAEP

Sample Question 1

This short constructed-response question measures students' perception of form. Responses were scored with a four-level scoring guide that allowed for partial credit. The correct response is A-B-A. Inadequate responses failed to classify any phrases (short musical segments) correctly. Limited responses classified one phrase correctly. Adequate responses classified two phrases correctly. Developed responses classified three phrases correctly.

Percentage of Eighth Graders Receiving Various Scores



NOTE: Percentages do not sum to 100 due to rounding.

Sample Question 1

The first piece of music you will hear will be for questions 1 to 3. The music has four phrases. Listen to the first phrase of the music.

Audio Link to "Au Clair de la Lune," first phrase, NAEP recording

Listen to the first phrase and the second phrase. If the second phrase is the same as the first phrase, mark the letter **A** in the space below. If the second phrase is different from the first phrase, mark the letter **B** in the space

Audio Link to "Au Clair de la Lune," first two phrases, NAEP recording

(A) (B)

Listen to the first phrase, the second phrase, and the third phrase. If the third phrase is the same as the first phrase, mark the letter **A** in the space below. If the third phrase is different from the first phrase, mark the letter **B** in the space

Audio Link to "Au Clair de la Lune," first three phrases, NAEP recording

(A) (B)

Listen to all four phrases. If the fourth phrase is the same as the first phrase, mark the letter **A** in the space below. If the fourth phrase is different from the first phrase, mark the letter **B** in the space

Audio Link to "Au Clair de la Lune," entire melody, NAEP recording

(A) (B)

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Audio Link to "Au Clair de la Lune," entire melody, NAEP recording

Sample Question 2

This multiple-choice question measures students' abilities to identify a specific timbre (the characteristic sound produced by a particular voice or instrument). Responses were scored as either correct or incorrect. The correct answer is A.

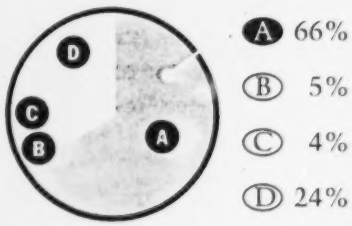
Sample Question 2

For question 2, you will hear the entire melody played again. The music will be played one time. Before you hear the music, read question 2.

The music was played on a

- (A) saxophone
- (B) trombone
- (C) bassoon
- (D) clarinet

Percentage of Eighth Graders Answering Correctly: 66%



NOTE: Percentages do not sum to 100 due to rounding.

Audio Link to "Au Clair de la Lune," melodic fragment, NAEP recording

Sample Question 3

This multiple-choice question measures students' abilities to perceive melodic contour. (Melodic contour refers to the pattern in which the notes of a melody move up or down, or are repeated.) Responses were scored as either correct or incorrect. The correct answer is B.

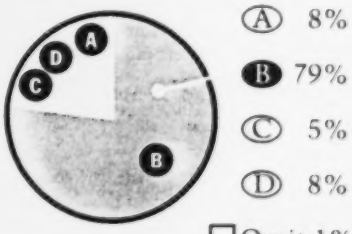
Sample Question 3

For question 3, you will hear one part of the melody played again. The music will be played one time. Before you hear the music, read question 3.

The part of the melody you heard moved in which kind of pattern?

- (A) Steps going up
- (B) Steps going down
- (C) Skips going up
- (D) Skips going down

Percentage of Eighth Graders Answering Correctly: 79%



NOTES: Percentages do not sum to 100 due to rounding.

The omit percentage reported includes student refusals, blank or multiple responses, and illegible or otherwise unscorable responses.

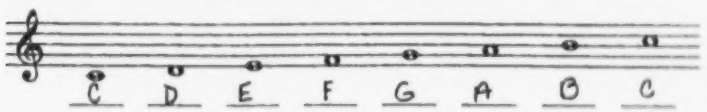
Sample Question 4

This short constructed-response question measures students' abilities to provide the letter names for notes in standard musical notation. The correct answer is shown in the student response below. Responses were scored with a four-level scoring guide that allowed for partial credit. Inadequate responses failed to label any notes correctly. Limited responses labeled one to four notes correctly. Adequate responses labeled five to seven notes correctly. Developed responses labeled all eight notes correctly.

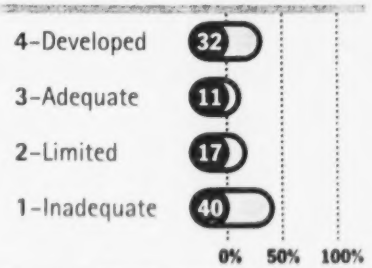
Sample Question 4 with Student Response Receiving a Score of Developed

There will be no music played for questions 4-7. You will have two minutes to answer questions 4-7. Read and answer questions 4-7 now.

Print the letter name of each note on the blank line underneath it.



Percentage of Eighth Graders Receiving Various Scores



NOTE: Of the 40 percent of student responses in the lowest score level, 12 percent consists of omits and otherwise unscorable responses.

Sample Question 5

This multiple-choice question measures students' knowledge of time signatures. Responses were scored as either correct or incorrect. The correct answer is B.

Sample Question 5

Which of the following is a correct time signature for the music?

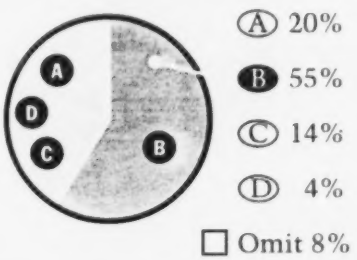
(A) 2/4

(B) 3/4

(C) 4/4

(D) 5/4

Percentage of Eighth Graders Answering Correctly: 55%



NOTES: Percentages do not sum to 100 due to rounding.

The omit percentage reported includes student refusals, blank or multiple responses, and illegible or otherwise unscorable responses.

Sample Question 6

This short constructed-response question measures students' knowledge of dynamic markings. Responses were scored with a three-level guide that allowed for partial credit. The following sample responses represent a Limited score and the highest score, Adequate.

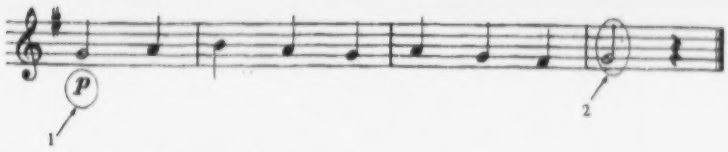
Percentage of Eighth Graders Receiving Various Scores

Score Level	Percentages
3-Adequate	20
2-Limited	11
1-Inadequate	69

0% 50% 100%

NOTE: Of the 69 percent of student responses in the lowest score level, 9 percent consists of omits and otherwise unscorable responses.

Sample Student Response Receiving a Score of Limited



What does the symbol in circle 1 tell the performer to do?

Go at a medium pace

What is the musical (Italian) name for the symbol in circle 1?

Piano

Limited. This limited response provided the name of the symbol, but not its correct meaning.

Sample Student Response Receiving a Score of Adequate

What does the symbol in circle 1 tell the performer to do?

Play the music softly.

What is the musical (Italian) name for the symbol in circle 1?

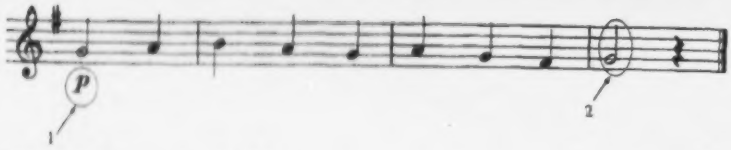
piano

Adequate. This adequate response provided both the meaning of the symbol and its name.

Sample Question 7

This multiple-choice question measures students' knowledge of rhythmic notation. Responses were scored as either correct or incorrect. The correct answer is C.

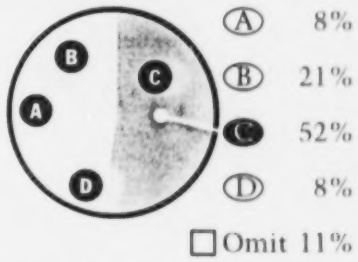
Sample Question 7



What kind of note is in circle 2 ?

- (A) An eighth note
- (B) A quarter note
- (C) A half note
- (D) A whole note

Percentage of Eighth Graders Answering Correctly: 52%



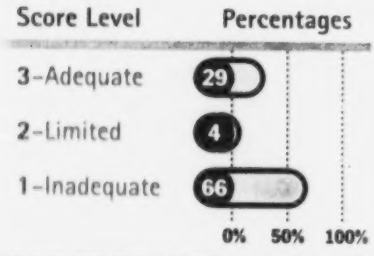
NOTE: The omit percentage reported includes student refusals, blank or multiple responses, and illegible or otherwise unscorable responses.

Audio Link to "Rhythm Pattern," NAEP recording

Sample Question 8

This short constructed-response question measures students' abilities to use standard musical notation and to create original music. (For purposes of analysis, results from each part of this question were classified as Creating, rather than Responding items.) Each measure of the response was scored separately for accurate use of musical notation. In addition, a separate score was given to the entire response with regard to the way in which a student did or did not create a musically satisfying ending. The use of accurate music notation was scored with a three-level guide that allowed for partial credit. The following sample student responses represent Inadequate, Limited, and Adequate scores.

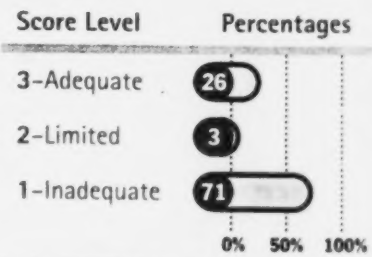
Percentage of Eighth Graders Receiving Various Scores — Measure 1



NOTES: Percentages do not sum to 100 due to rounding.

Of the 66 percent of student responses in the lowest score level, 8 percent consists of omits and otherwise unscorable responses.

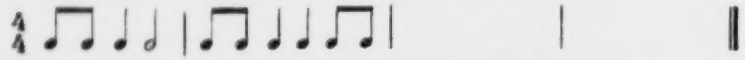
Percentage of Eighth Graders Receiving Various Scores — Measure 2



NOTE: Of the 71 percent of student responses in the lowest score level, 22 percent consists of omits and otherwise unscorable responses.

Sample Question 8

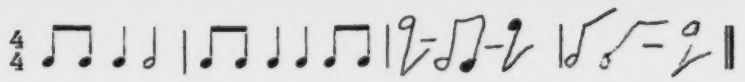
For question 8, you are to write an ending for the rhythmic pattern you see below. You will hear it played two times. After you hear the rhythmic pattern, write an ending to the pattern in the empty measures printed in your test booklet. The music that you write should make the rhythm sound finished. You may use notes or rests in your answer, but do not copy any of the measures that are already used in the music. Make sure that the ending that you write has the correct number of beats.



Inadequate responses for musical notation for a given measure contained notation that did not add up to four beats, or that merely copied the notation in the first part of the rhythmic phrase.

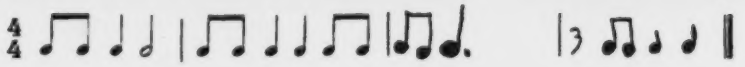
Limited responses for a given measure included notation that added up to four beats, but which had one or more technical errors, such as an incorrect stem. Adequate responses for a given measure included notation that added up to four beats and which had no notation errors.

Sample Student Response 1: Use of Musical Notation



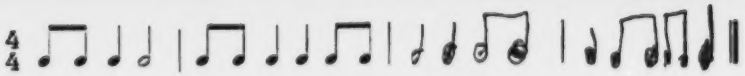
Each measure of this response was scored as Inadequate.

Sample Student Response 2: Use of Musical Notation



The first measure of this response was scored Inadequate; the second measure was scored as Adequate.

Sample Student Response 3: Use of Musical Notation



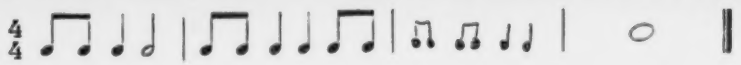
The first measure of this response was scored as Limited because the first eighth note has not been filled in. (It was assumed that the first note in the third measure was a half note.) The second measure of the response was scored as Adequate.

Sample Student Response 4: Use of Musical Notation

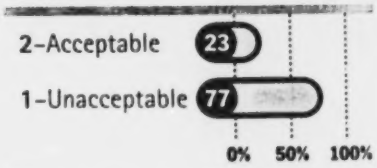
Each measure of this response was scored Adequate.

The quality of students' endings was scored as either Acceptable or Unacceptable. Unacceptable responses ended on weak beats or on weak parts of the beat, had missing beats, or used notation that was so flawed that it could not be interpreted. Acceptable responses, such as the one below, created a musically satisfying ending by concluding on a strong beat.

Sample Student Response Receiving a Score of Acceptable: Ending



Percentage of Eighth Graders Receiving Various Scores — Ending



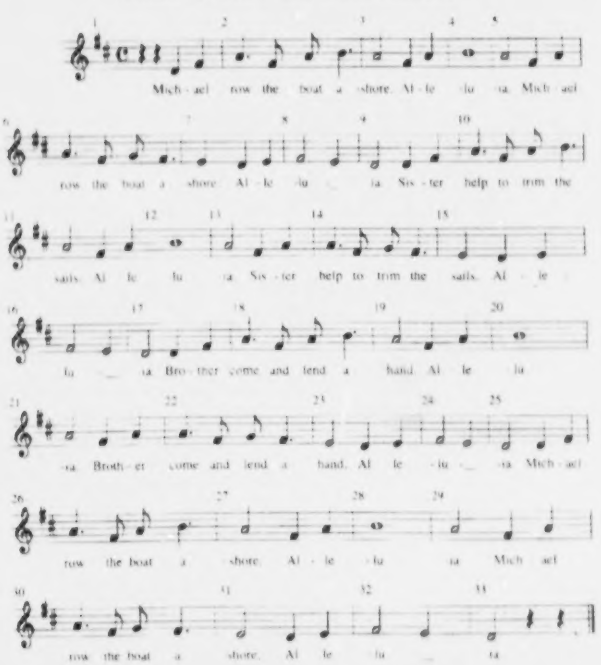
NOTE: Of the 77 percent of student responses in the lowest score level, 23 percent consists of omits and otherwise unscorable responses.

Audio Link to "Michael Row the Boat Ashore," NAEP recording

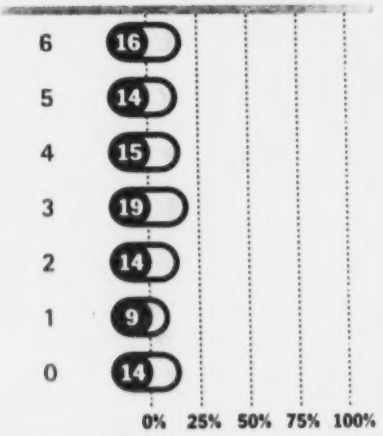
Sample Question 9

This extended constructed-response question measures students' abilities to critique a vocal performance. Each of the three suggestions that students provided was scored separately as Inadequate (no credit), Limited (1 point), or Adequate (2 point) scores. Limited responses provided either a location of an error or cited a specific error, but not both. Adequate responses provided both an accurate error and its specific location. Each student's total score for Question 9 was calculated by adding together the points earned for each of the three separate responses asked for in the question.

Written Musical Stimulus for Sample Question 9

Michael Row the Boat Ashore

Mich - ael row the boat a - shore Al - le - lu - ia Mich - ael
row the boat a - shore Al - le - lu - ia Sis - ter help to trim the
sails Al - le - lu - ia Sis - ter help to trim the sails Al - le
lu - ia Broth - er come and lend a hand Al - le - lu
- ia Broth - er come and lend a hand Al - le - lu - ia Mich - ael
row the boat a - shore Al - le - lu - ia Mich - ael
row the boat a - shore Al - le - lu - ia

Percentage of Eighth Graders Receiving Various Scores



NOTES: Percentages do not sum to 100 due to rounding.

Of the 14 percent of student responses in the lowest score level, 3 percent consists of omits and otherwise unscorable responses.

Sample Student Response to Question 9

The music for question 9 is performed by a person who is learning to sing a song. The music for the song is printed on page 8 of your test booklet. Each measure of the music has been numbered in its upper left-hand corner.

In the performance you will hear, the first two verses of the song will be sung correctly. However, starting at measure 17, which is the third verse, you will hear several mistakes in the performance.

As you listen, you may write on the music or circle places in the music where you hear mistakes, but be sure to write your answer on the lines on this page. The music will be played two times. After you hear the music, read question 9.

Identify three specific places in the music where the singer made mistakes. Tell what the mistake was in each place you name.

In measure 20

measure 24

measure 30

This response was scored 1-1-1, for a total of 3 points. In each case, the student provided a Limited response which listed the measure number of an error but failed to discuss the mistake in the performance.

Sample Student Response to Question 9

Identify three specific places in the music where the singer made mistakes. Tell what the mistake was in each place you name.

measure 6, went down on the notes instead of going up

Measure 20, didn't hold the note long enough

Measure 29 & 25, didn't hold long enough

This response was scored 0-2-2, for a total of 4 points. The first response was scored as Inadequate because it is incorrect. The second and third responses are Adequate.

Sample Student Response to Question 9

Identify three specific places in the music where the singer made mistakes. Tell what the mistake was in each place you name.

20 she paused and wasn't supposed to.

30 on row she sang the note to high.

33 she sang the last note too long.

This student received 2-2-2, for a total of 6 points. In each case, the student provided an Adequate response by naming a specific location and describing a specific error.

Sample Question 10

This short constructed-response question measures students' awareness of the function of music in society. Responses were scored with a three-level guide that allowed for partial credit. The following sample student responses represent a Limited score and the highest score, Adequate.

Sample Student Response to Question 10 Receiving a Score of Limited

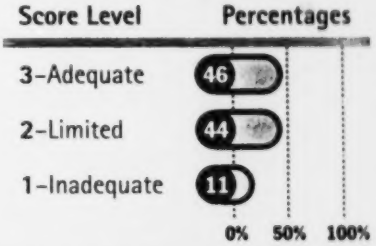
Describe two different ways music is used in movies or television shows.

a song in movie

showing action

Limited. In the second part of this Limited response, the student provides one functional use of music. The student did not receive credit for the first part of the response because it was too vague.

Percentage of Eighth Graders Receiving Various Scores



NOTES: Percentages do not sum to 100 due to rounding.

Of the 11 percent of student responses in the lowest score level, 2 percent consists of omits and otherwise unscorable responses.

Sample Student Response to Question 10 Receiving a Score of Adequate

Describe two different ways music is used in movies or television shows.

Music in movies used to show excitement and more emotional scenes; takes up time for credits @ the end

Music in television shows used to identify specific shows, as well as to make more interesting to hear for viewers

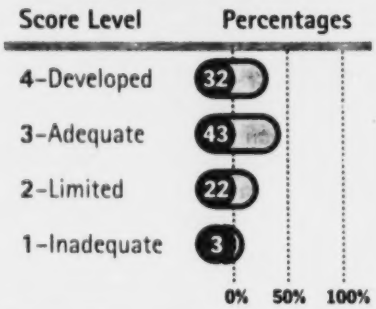
Adequate. In each of the two parts of this Adequate response, the student provided a functional use of music. The wording of the second part of the response was interpreted as referring to "theme music."

(The music played for Question 11 was the first 55 seconds of "The Washington Post March" by John Philip Sousa. The recording used was from NIMBUS CD #NI 5129.)

Sample Question 11

This short constructed-response question measures students' awareness of the function of music in society. Responses were scored with a four-level guide that allowed for partial credit. Responses in which students correctly answered the multiple-choice part of the question (D) but failed to explain why were scored as Limited. The following sample student responses represent an Adequate score and the highest score, Developed.

Percentage of Eighth Graders Receiving Various Scores



NOTE: Of the 3 percent of student responses in the lowest score level, 1 percent consists of omits and otherwise unscorable responses.

Sample Student Response to Question 11 Receiving a Score of Adequate

You would most likely hear this music at a

(A) funeral
(B) wedding
(C) rock concert
(D) parade

Describe one specific detail in the music you heard that makes it useful for the event you selected.

The music has an upbeat sound and it has a happy mood and good tone.

Adequate. This student response was scored as Adequate. The student provided a correct response to the multiple-choice part of the question; however, the rationale for the student's choice was judged as rather general and not specifically descriptive of the music played.

Sample Student Response to Question 11 Receiving a Score of Developed

You would most likely hear this music at a

(A) funeral
(B) wedding
(C) rock concert
(D) parade

Describe one specific detail in the music you heard that makes it useful for the event you selected.

it has a good marching beat, and it is enjoyable

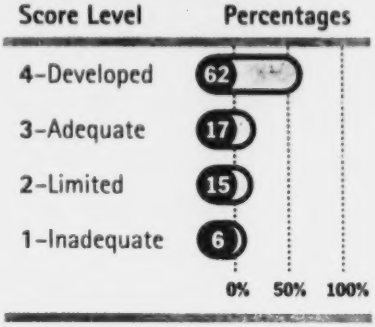
Developed. This student response was scored as Developed because it provided a correct response to the multiple-choice part of the question and offered a specific reference to an element of the music.

(The music played for Question 12 was the first 50 seconds of an instrumental arrangement of Brahms' "Lullaby." The recording used was from CBS CD #MDK 44998, copyright CBS Records, 1989.)

Sample Question 12

This short constructed-response question measures students' awareness of the function of music in society. Responses were scored with a four-level guide that allowed for partial credit. Responses that correctly answered the multiple-choice part of the question (B) but failed to explain why were scored as Limited. The following sample student responses represent Adequate and Developed scores.

Percentage of Eighth Graders Receiving Various Scores



NOTE: Of the 6 percent of student responses in the lowest score level, 1 percent consists of omits and otherwise unscorable responses.

Sample Student Response to Question 12 Receiving a Score of Adequate

What would be a common way to use this music?

(A) To provide music for tap dancing
(B) To help young children fall asleep
(C) To help people feel patriotic
(D) To cheer on sports teams

Describe one specific feature of the music that makes it useful for the purpose you selected.

The sound and speed that make young children fall asleep

Adequate. This response was scored as Adequate because the student correctly answered the multiple-choice part of the question but only supplied a brief reference to a relevant feature of the music.

Sample Student Response to Question 12 Receiving a Score of Developed

What would be a common way to use this music?

(A) To provide music for tap dancing
(B) To help young children fall asleep
(C) To help people feel patriotic
(D) To cheer on sports teams

Describe one specific feature of the music that makes it useful for the purpose you selected.

it is quiet, soft, and relaxing
so it would be good to put children
to sleep with

Developed. This student response was scored as Developed because it provided the correct answer to the multiple-choice question along with a specific description of an appropriate musical feature.

Audio Link to "Wade in the Water," entire song, copyright 1994, Smithsonian Folkways Recordings

Sample Question 14

This multiple-choice question measures students' knowledge of meter. Responses were scored as either correct or incorrect. The correct answer is B.

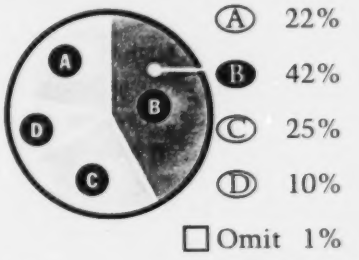
Sample Question 14

The music for questions 14-16 will be played one time. After you hear the music, you will have two minutes to answer questions 14-16. Before you hear the music, read questions 14-16.

Which of the following would be a correct time signature for the music?

(A) $\frac{3}{4}$
(B) $\frac{4}{4}$
(C) $\frac{5}{4}$
(D) $\frac{9}{8}$

Percentage of Eighth Graders Answering Correctly: 42%

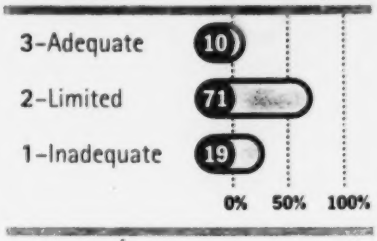


NOTE: The omit percentage reported includes student refusals, blank or multiple responses, and illegible or otherwise unscorable responses.

Sample Question 15

This short constructed-response question measures students' knowledge of features of musical style. Responses were scored with a three-level guide that allowed for partial credit. The following sample student responses represent a Limited score and the highest score, Adequate.

Percentage of Eighth Graders Receiving Various Scores



NOTE: Of the 19 percent of student responses in the lowest score level, 3 percent consists of omits and otherwise unscorable responses.

Sample Student Response to Question 15 Receiving a Score of Limited

Describe in detail one specific feature of the music that helps to identify this song as a spiritual.

it has a slow beat and it sounds sad

Limited. This student response was scored as Limited because it only generally described the music, without reference to a characteristic stylistic feature.

Sample Student Response to Question 15 Receiving a Score of Adequate

Describe in detail one specific feature of the music that helps to identify this song as a spiritual.

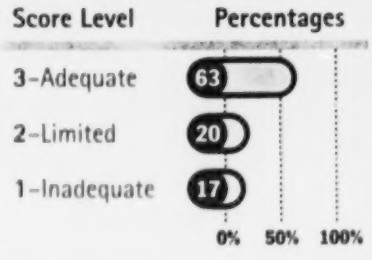
This music has one person take a solo then join back in a chorus They all sing the chorus

Adequate. This student response was scored as Adequate because it provided a specific description of an important stylistic feature associated with spirituals.

Sample Question 16

This short constructed-response question measures students' knowledge of historical contexts of music. Responses were scored with a three-level guide that allowed for partial credit. The following sample student responses represent a Limited score and the highest score, Adequate.

Percentage of Eighth Graders Receiving Various Scores



NOTE: Of the 17 percent of student responses in the lowest score level, 3 percent consists of omits and otherwise unscorable responses.

Sample Student Response to Question 16 Receiving a Score of Limited

Give one specific reason why spirituals such as this one were important in the daily lives of the people who originally sang them.

it tells about their life

Limited. This student response was scored as Limited because it offered a minimal description of the importance of spirituals.

Sample Student Response to Question 16 Receiving a Score of Adequate

Give one specific reason why spirituals such as this one were important in the daily lives of the people who originally sang them.

It gave them a chance to express themselves and how they felt.

Adequate. This student response was scored as Adequate because it offered a specific rationale for the importance of spirituals.

Figure 2.5

Sample questions and student responses from the "Minuet in G" block are found on the CD-ROM version of this report.

Part Two

The Music Responding Item Map and Student Profile

Reporting the Music Assessment Results

In this section, overall summaries of Responding results and their relationship to student-reported background variables are featured.

The overall summaries deal with Responding, Creating, and Performing results separately. While the knowledge and skills students draw upon to Create, Perform, and Respond in music do overlap and inform one another, it is plausible that some students will Create and Perform but not Respond well, and vice versa. To do justice to differing abilities among students, results for Creating, Performing, and Responding exercises are summarized separately.[6]

The Music Responding Scale

The music assessment measured students' Responding abilities with both short and extended constructed-response exercises and with multiple-choice questions. Item Response Theory (IRT) methods were used to produce a scale that summarizes results for the Responding exercises. The scale ranges from 0 to 300. Item Response Theory (IRT) is a set of statistical models useful in summarizing student performance across a collection of test exercises requiring similar knowledge and skills. In the context of the music assessment, IRT methods were used to create a summarizing scale that relates the probability of students doing well or badly on the music assessment exercises to their general Responding abilities in music.

Preliminary analyses of the data for Responding items indicated that the fit of the items on scales could be improved by grouping items into two general types – those that included work with standard music notation and those that did not. For reporting, items on each of these interim scales were combined into an overall composite scale.

Student responses to Responding exercises were analyzed to determine: (1) the percentage of students responding correctly to each multiple-choice question, and (2) the percentage of students achieving each of the score levels for constructed-response questions.

It is useful to illustrate the level of performance of students with a given scale score by identifying questions likely to be answered correctly by students with that scale score. This process is known as "mapping." The position of a question on the Responding scale represents the scale score attained by students who had: (1) at least a 65 percent probability of reaching a given score level on a constructed-response question, or (2) at least a 74 percent probability of correctly answering a multiple-choice question.

The music Responding scale item map is presented in Figure 2.6. Multiple-choice questions are shown in italics, and constructed-response questions in regular typeface. The item map indicates selected examples of the types of questions that were likely to be answered successfully at given rates of probability by students scoring at particular levels on the Responding scale. Constructed-

6 Furthermore, a measurement requirement for summarizing student responses to different exercises together is that those exercises measure the same or similar knowledge and skills. The range of music knowledge and skills is very wide. Knowledge and skills are also related in subtle and various ways in their applications to Creating, Performing, and Responding. These factors diminish the possibility that the processes, in strict measurement terms, utilize knowledge and skills in ways similar enough to be summarized on a single scale.

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response items may appear more than once on the scale, with different scale point levels indicating different levels of partial credit or full credit using the multi-level scoring guide. For example, consider the question appearing at scale points 89 and 180 on the music Responding scale. The question asked students to provide two different ways in which music is used in movies or television shows. Scoring of this question allowed for partial credit by using a three-level scoring guide. As is indicated in Figure 2.6, at least 65 percent of the students at Responding scale point 89 were able to provide one way music is used in movies or television shows. These students scored partial credit (Level 2: Limited) on this question. At Responding scale point 180, at least 65 percent of the students were able to provide two different ways music is used in movies or television shows. These students earned full credit (Level 3: Adequate) on this question.

Individual multiple-choice questions appear one time on the Responding scale. For example, at least 74 percent of the students scoring at or above scale point 179 were able to identify a half note shown in standard music notation. For both multiple-choice and constructed-response questions, appearance of a given question at a Responding scale point does not mean that all students below that score point failed to answer the question correctly or that all students above that scale point answered the question correctly. Rather, the appearance of a question at a given point on the Responding scale indicates its relative level of difficulty and the overall performance of students of similar levels of ability for all items in the music Responding scale.

Figure 2.6

Map of Selected Questions on the NAEP Music Responding Scale: Grade 8

300

Upper Level

(296) Identify country of origin of koto music and provide specific reason why.
(282) Provide a specific description of a characteristic feature of a spiritual.
(277) Provide likely style period for Handel aria and give limited justification.
(256) Provide appropriate tempo description or tempo marking for "Shalom, My Friends."
(247) Identify one element of jazz present in "Rhapsody in Blue."
(239) Identify genre of Joplin piano rag and describe its features.
(238) *Identify the term "monophony" describing musical texture of a recording.*
(208) *Identify the size of an interval between two printed notes.*
(205) Describe a specific difference between two different orchestrations of a piece.
(202) *Select a line drawing reflective of the texture of an example of music.*
(196) *Identify the term for a fermata symbol.*
(191) Describe the meaning of a fermata symbol.
(182) Label all 8 notes of a C Major Scale in treble clef.
(181) Either identify name of piano dynamic marking or explain its meaning.
(180) Identify 2 different ways music is used in movies or television shows.
(179) *Identify a half note symbol.*
(179) Provide one limited description of either mood, melodic instruments, or another feature of an Ives' variation.

75th Percentile 173

Middle Level

(171) *Select correct time signature for printed music.*
(163) *Identify a bass clef symbol.*
(150) Identify an appropriate use for Brahms' "Lullaby" and explain why.
(150) Label 1 note of a C Major Scale in treble clef.
(150) Determine the length of the introduction of "Shalom, My Friends."
(144) Provide three specific critical comments about a performance of "Michael Row the Boat Ashore."
(128) Identify an appropriate event for a Sousa march, and provide at least some explanation.

25th Percentile 127

Lower Level

(116) Provide a limited explanation of why spirituals were important in people's lives.
(110) Provide one critical comment about a performance of "Michael Row the Boat Ashore."
(105) Provide a limited description of a characteristic feature of a spiritual.
(89) Identify one way music is used in movies or television shows.
(60) Correctly identify at least one of three phrases as being the same or different from an example.

0

NOTE: Italic type indicates a multiple-choice question. Regular type indicates a constructed-response question.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

The Music Responding Item Map

As is presented in Figure 2.6, the NAEP music Responding scale, ranging from 0 to 300, summarizes the overall Responding score results of students. The following descriptions of students' Responding knowledge and skills in music are based on sets of questions that were answered successfully by students performing within three ranges of the scale. These ranges represent lower-, middle-, and upper-level performances based on percentiles.[7]

Students in the Lower Range of the Responding Scale

Students who were in the lower range of the music scale (points 0 to 127) were able to make simple distinctions about the music phrases they heard as being the same or different from examples played. They showed a limited knowledge of the functional uses of music in society and limited knowledge of the historical or cultural significance of musical genres such as spirituals. Students in this group were able to describe adequately one error heard in a performance of the folk song "Michael Row the Boat Ashore."

Students in the Middle Range of the Responding Scale

Students who were in the middle range of the music scale (points 128 to 173) showed a broader understanding of the functions of music in society; they were, for example, able to determine and justify appropriate uses of lullabies and marches. Students at the middle level of proficiency demonstrated knowledge of basic terms and fundamentals of music notation, such as selecting a time signature, knowing the term for the bass clef, and being able to label pitches in the treble clef. Students in this group were able to describe adequately three errors heard in a performance of the folk song "Michael Row the Boat Ashore."

Students in the Upper Range of the Responding Scale

Students who were in the upper range of the music scale (points 174 to 300) were able to identify appropriate line drawings reflective of the texture of music they heard. These students were able to provide limited descriptions of aspects of music they heard, such as describing differences between two different arrangements of the same piece. Students in this group were able to identify the genres or style periods of some pieces of music they heard (such as a Joplin piano rag and an aria by Handel) and could provide limited justification for their categorizations. Students in the upper range displayed skills in more advanced concepts in standard music notation and music terminology, such as some knowledge of tempo markings, dynamics, fermatas, intervals, and terms used to describe texture, such as "monophony."

Profile of Students' Music Experiences

An examination of opportunity-to-learn factors provided by students in the music background questionnaires helps to illustrate activities that are associated with various levels of proficiency in the NAEP music Responding scale. As shown in Figure 2.7, enrollment in some type of school music ensemble was associated with generally higher levels of performance on the NAEP music Responding scale, especially in distinguishing between groups of middle-level and upper-level students.[8] Notably higher percentages of enrollments in school bands and choruses were observed in the middle-level and upper-level groups of students, in contrast to students in the lower-level group. A similar contrast is observed in orchestra enrollment between the upper-level and lower-level groups of students.

Other activities that were associated with higher levels of proficiency in the music Responding scale include taking private music lessons on a musical instrument or in singing out of school, ownership of a musical instrument, participating in some type of musical ensemble outside of school, attending music concerts with a class, and talking with family or friends about music. The overall percentages of students reporting listening to music were very high. The percentage of students indicating listening to music tended to increase between the group of students in the lower level and the middle level of the NAEP music Responding scale.

7 A percentile is a scale score below which a specified percentage of the population scored. For example, the 25th percentile as given in Figure 2.6 is 127. Twenty-five percent of students had scale scores of 127 or lower. Similarly, the 75th percentile as shown in Figure 2.6 is 173. Seventy-five percent of the students had scale scores of 173 or lower. Equivalently, 25 percent of the students had scale scores above 173.

8 The lower group comprised students whose scores fell into the lowest 25 percent of the population. The middle group comprised students whose scores fell into the middle 50 percent of the population. The upper group comprised students whose scores fell into the highest 25 percent of the population.

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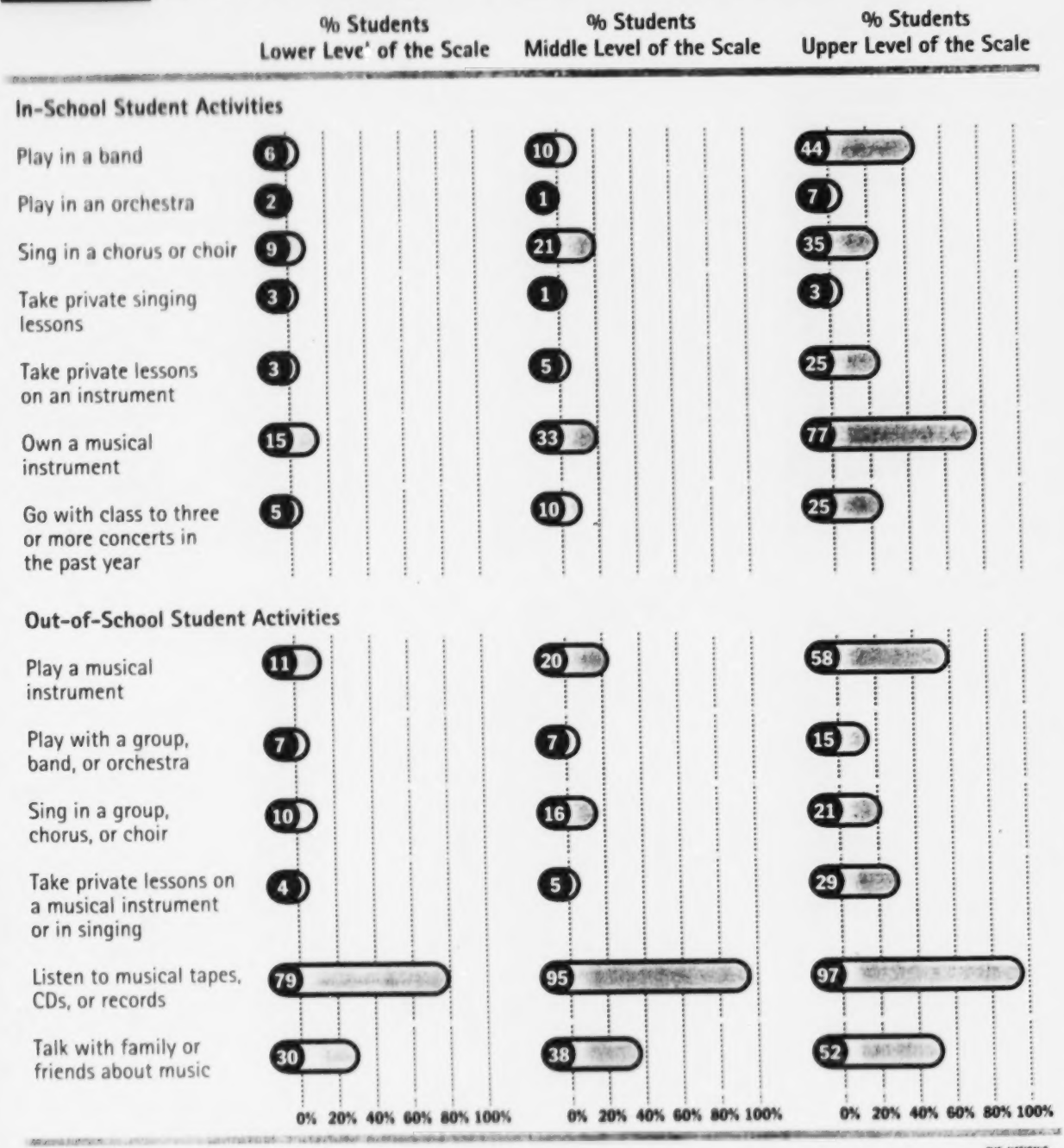
Figure 2.7 **Music Responding Profile of Percentages of Students in Lower, Middle, and Upper Levels of the Responding Scale, by Selected In- and Out-of-School Activities**



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Relationships Between Student Music Creating, Performing, and Responding Results

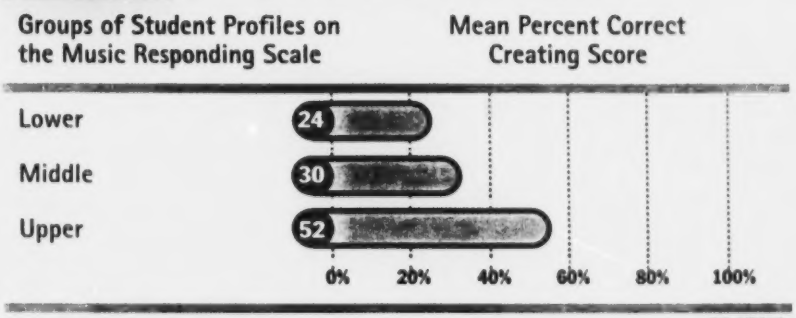
Because the NAEP arts framework describes the interrelationships among the artistic processes of Creating, Performing, and Responding, it is useful to examine how student performance in one process is related to performance in the others. Figures 2.8 and 2.9 present data indicating the percent correct of possible scores for music Creating and Performing earned by students in each of the groups (lower, middle, and upper) for the music Responding scale. As is shown in Figures 2.8 and 2.9, there is a positive relationship between students' scores in music Responding and their scores in music Creating and Performing.

As shown in Figure 2.8, students in the lower group for music Responding received an overall mean of 24 percent of the possible points in the Creating score. The respective figures for students in the middle group and the upper group were 30 percent and 52 percent. Creating scores of students in the middle level of the Responding scale were significantly higher than scores of students in the lower level of the Responding scale. Creating scores of students in the upper level of the Responding scale were significantly higher than groups of students in the middle and lower levels.

As shown in Figure 2.9, students in the lower group for Responding received an overall mean of 18 percent of the possible points in the Performing score. Students in the middle group received 29 percent, and students in the upper group received 56 percent of the possible points in Performing. Performing scores of students in the middle level of the Responding scale were significantly higher than scores of students in the lower level of the Responding scale. Performing scores of students in the upper level of the Responding scale were significantly higher than groups of students in the middle and lower levels.

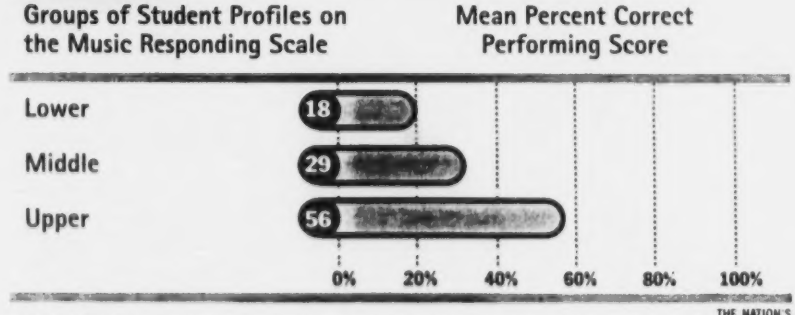
The patterns of student achievement shown in Figures 2.8 and 2.9 may suggest several interpretations. Further research is needed to examine the ways in which Creating, Performing, and Responding abilities are related.

Figure 2.8 **Creating Mean for Lower, Middle, and Upper Responding Score Groups**



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Figure 2.9 **Performing Mean for Lower, Middle, and Upper Responding Score Groups**



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Part Three

Sample Tasks from the Music Creating and Performing Blocks

Creating and Performing Blocks for Students in the General Student Population

Part Three describes the music Creating and Performing blocks and illustrates student responses to the exercises. For each of the Creating and Performing music blocks, students completed the tasks individually by appointment following the class administration of the music Responding blocks. Each of the performance sessions was recorded in entirety on audiotape in order to collect student responses for later scoring. There were a total of five different NAEP music Creating and Performing blocks. Three of the blocks were intended for the general student body, including both students who were or were not currently involved in a music activity. Each student completed one of the three general Creating and Performing blocks of exercises. The three general Creating and Performing blocks are described in Figures 2.10–2.12. Two additional blocks were designed to be administered only to students who indicated current enrollment in some type of musical activity, such as singing in a school chorus or taking private music lessons. Each of the students who was sampled for a supplemental block of exercises completed one of the two additional blocks directly after finishing one of the three Creating and Performing blocks designed for the general student body. The two supplemental blocks are described in Figures 2.13 and 2.14.

Figure 2.10

Sample Questions and Student Responses from the "'The Lion Sleeps Tonight'/'Twinkle, Twinkle, Little Star'" Block are found on the CD-ROM version of this report.

Figure 2.11

Sample Questions and Student Responses from the "'Ode to Joy'/Sing 'America'" Block are found on the CD-ROM version of this report.

Figure 2.12

Sample Questions and Student Responses from the "Rock Improvisation and Evaluation" Block are found on the CD-ROM version of this report.

Creating and Performing Blocks for Students Enrolled in Music Activities

In addition to the three music blocks for the general student population described in Figures 2.10 to 2.12, the NAEP music assessment contained two additional blocks of activities designed for students currently involved in musical activities. Students who indicated current involvement in some type of in-school or out-of-school music activity were eligible to be selected for administration of a second music Creating and Performing block. Students who were sampled for one of the two supplemental music blocks completed that block after first completing one of the three Creating and Performing blocks designed for the general student population. The two supplemental NAEP music assessment blocks are described in Figures 2.13 and 2.14.

Figure 2.13

Sample Questions and Student Responses from the "Jazz Improvisation and Melodic Sight-Reading" Block are found on the CD-ROM version of this report.

Figure 2.14

Sample Questions and Student Responses from the "Large Ensemble" Block are found on the CD-ROM version of this report.

Part Four

Summarizing Music Creating and Performing Results

Creating and Performing tasks in the NAEP music assessment, unlike the Responding items, were administered to students individually. Because of the amount of time needed to administer and score exercises individually, it was necessary to limit the overall number of Creating and Performing items contained in the assessment.

Because of the relatively small number of Performing and Creating items, it was not feasible to create overall scales using item response theory (IRT) for these constructs. Rather, Creating and Performing results are presented in terms of a total (or "aggregate") score for each. In this section, student results are presented as average percents of the maximum score possible for a given aggregate score. The results for the additional Creating and Performing tasks administered to the special subsample of students currently enrolled in a music activity (see Figures 2.13 and 2.14 in Part 3) are not included in the overall Creating and Performing aggregate scores.

Creating and Performing Results and Student Opportunity-to-Learn Data

The NAEP music assessment student background questionnaire asked students to report how frequently they engaged in various musical activities in school and out of school. Tables 2.7 to 2.11 present the Creating and Performing scores of students linked to response categories from the student questionnaires. Although the results presented in these tables should not be used to infer causal relationships, they do allow researchers to examine overall patterns of results.

Table 2.7 Percentages of Students and Their Performing Scores by Students' Involvement in Various In-School Music Activities

When you take music class in school, how often does your teacher do each of the following things?

Play Music for You to Listen to	% Students	Average Performing Score (0–100%)
Almost Every Day	28	33
Once or Twice a Week	13	39
Once or Twice a Month	10	44
Never or Hardly Ever	14	35
I Don't Have Music	34	29

Ask You to Sing	% Students	Average Performing Score (0–100%)
Almost Every Day	13	40
Once or Twice a Week	11	36
Once or Twice a Month	6	32
Never or Hardly Ever	35	36
I Don't Have Music	35	29

Ask You to Play Instruments	% Students	Average Performing Score (0–100%)
Almost Every Day	16	53
Once or Twice a Week	6	38
Once or Twice a Month	6	35
Never or Hardly Ever	32	31
I Don't Have Music	40	27

NOTE: Percentages do not sum to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 2.7 presents overall performing scores linked to students' responses to questions about their involvement in musical activities. As this table shows, sampling estimates of the total percentage of eighth grade students not enrolled in a music class ranged from 34 to 40 percent. This group of students obtained a total of from 27 to 29 percent of the total possible points available for performance items. Analysis of the percentages of students indicating various frequencies for selected music activities in their school music class revealed several significant differences between groups in performing scores. Students who indicated that they were not in any school music class scored significantly lower in performing than students whose music teachers played music for the class to listen to once or twice a week, or once or twice a month. There were no differences between the performance scores of students not enrolled in music and those whose teachers played music almost every day or never or hardly ever. Students whose music teachers played music once or twice a month scored significantly higher than students whose teachers played music almost every day.

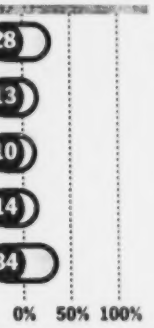
Students whose music teachers asked students to sing almost every day scored significantly higher in performing than students who reported not having music. In addition, students enrolled in a school music class in which the teacher never or hardly ever asked students to sing scored significantly higher than students not enrolled in any school music class.

Students whose music teachers asked students to play instruments almost every day scored significantly higher in performing than all other groups of students. In addition, students whose music teachers asked students to play instruments once or twice a week scored significantly higher than students who were not enrolled in a school music class.

Table 2.8 Percentages of Students and Their Creating Scores by Students' Involvement in Various In-School Music Activities

When you take music class in school, how often does your teacher do each of the following things?

Play Music for You to Listen to	% Students	Average Creating Score (0–100%)
Almost Every Day	28	33
Once or Twice a Week	13	42
Once or Twice a Month	10	42
Never or Hardly Ever	14	33
I Don't Have Music	34	30



Ask You to Sing	% Students	Average Creating Score (0–100%)
Almost Every Day	13	42
Once or Twice a Week	11	35
Once or Twice a Month	6	37
Never or Hardly Ever	35	35
I Don't Have Music	35	31

Ask You to Play Instruments	% Students	Average Creating Score (0–100%)
Almost Every Day	16	50
Once or Twice a Week	6	41
Once or Twice a Month	6	35
Never or Hardly Ever	32	31
I Don't Have Music	40	30

Ask You to Write Down Music	% Students	Average Creating Score (0–100%)
Almost Every Day	5	39
Once or Twice a Week	10	37
Once or Twice a Month	11	39
Never or Hardly Ever	36	37
I Don't Have Music	38	30

Ask You to Make up Your Own Music	% Students	Average Creating Score (0–100%)
Almost Every Day	4	40
Once or Twice a Week	5	35
Once or Twice a Month	8	34
Never or Hardly Ever	47	38
I Don't Have Music	37	30

Table 2.8 presents results for overall Creating scores linked to students' responses to questions about their involvement in musical activities. As this table shows, students who were enrolled in music classrooms in which teachers played music for students once or twice a week, or once or twice a month, scored significantly higher in overall Creating scores than students whose teachers played music almost every day, or never or hardly ever, and students who did not receive music instruction. Students who were enrolled in classes in which the teacher asked students to sing almost every day scored significantly higher in Creating than did students whose teacher asked them to sing once or twice a week, or never or hardly ever, and students who were not enrolled in music.

NOTE: Percentages do not sum to 100 due to rounding.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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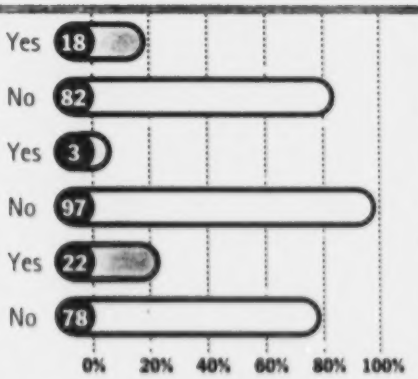
Students whose teachers asked them to play instruments every day scored significantly higher in Creating than students in all other groups. Students whose teachers asked them to play instruments at least once or twice a week scored significantly higher than students whose teachers never or hardly ever asked them to play instruments, and students who were not enrolled in music.

Students enrolled in music classes in which teachers asked them to write down music once or twice a week, once or twice a month, or never or hardly ever, scored significantly higher in Creating than students who did not have music. Very few students indicated that their music teacher asked them to create their own music. The group of students who were enrolled in music but indicated that their teacher never or hardly ever asked them to make up their own music scored significantly higher in Creating than the students who were not enrolled in music.

Table 2.9 presents results for overall Performing and Creating scores linked to student involvement in school performing ensembles. As this table shows, students who were enrolled in a school band or chorus scored significantly higher in Performing than students who were not. (There were too few students enrolled in school orchestras to make a comparison between groups for Performing scores.) In addition, students enrolled in school bands, orchestras, or choruses scored higher in Creating scores than students who were not enrolled in a performing ensemble.

Table 2.9 **Percentages of Students and Their Performing and Creating Scores by Students' Involvement in Various In-School Music Activities**

Which of the following activities do you do in school?		% Students	Average Performing Score (0-100%)	Average Creating Score (0-100%)
Play in a Band	Yes	18	52	50
	No	82	30	31
Play in an Orchestra	Yes	3	—	53
	No	97	33	34
Sing in a Chorus or Choir	Yes	22	43	40
	No	78	31	33

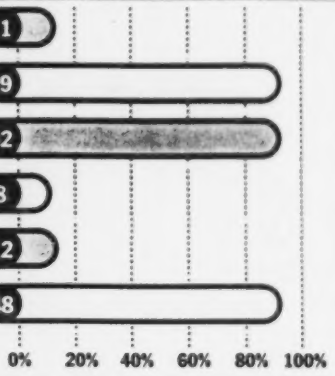


NOTE: – Sample size is insufficient to provide a reliable estimate.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 2.10 presents Performing and Creating score results linked with students' involvement in selected musical activities outside of school. The data show that involvement in out-of-school musical activities is associated with significantly higher scores in Performing and Creating. In each case, students who indicated that they took private lessons; listened to musical tapes, CD's, or records; or read books about music, had significantly higher scores in Performing and in Creating than students who did not do so.

Table 2.10 **Percentages of Students and Their Performing and Creating Scores by Students' Involvement in Various Out-of-School Music Activities**

When you are NOT in school, do you ever do the following things on your own, NOT in connection with schoolwork?		% Students	Average Performing Score (0-100%)	Average Creating Score (0-100%)
Take Private Lessons on a Musical Instrument or in Singing	Yes	11	59	52
	No	89	31	32
Listen to a Musical Tape, CD or Record	Yes	92	35	35
	No	8	21	29
Read a Book About Music	Yes	12	41	42
	No	88	33	33



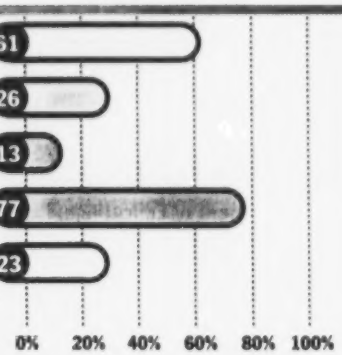
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 2.11 presents students' Performing and Creating score results linked with their attendance at concerts and musical performances. As this table shows, increased attendance at concerts and musical performances is associated with higher scores in Performing. Students who attended three or more concerts with their class during the past year had higher Performing scores than students who had attended fewer or no concerts. In addition, students who attended one or two concerts with their class in the past year had higher Performing scores than students who did not attend any. Listening to musical performances at school is also associated with higher Performing scores. Students who indicated that they had listened to at least one musical performance at school had higher proficiency than students who did not.

Students' scores in Creating followed many patterns similar to those in Performing. Students who attended three or more concerts with their class during the past year scored significantly higher in Creating than students who did not. Students who indicated that they had listened to at least one musical performance at school displayed higher proficiency than students who had not.

Table 2.11 **Percentages of Students and Their Performing and Creating Scores by Students' In-School Experiences**

Listening to or attending musical performances		% Students	Average Performing Score (0–100%)	Average Creating Score (0–100%)
In the last year, how many times did you go with your class to a concert?	None	61	31	32
	1 or 2	26	37	35
	3+	13	43	45
Have you ever listened to a musical performance at school?	Yes	77	36	36
	No	23	24	30



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Summary

Chapter 2 described students' proficiencies in music Creating, Performing, and Responding, as well as relating results in each of those processes to school and student background variables. The design of the NAEP music assessment allowed for exploration of a wide range of skills and abilities. Some items and tasks were relatively easy for students to complete successfully; others were more difficult for students to master. The results obtained in the various parts of the NAEP music assessment can help to provide a picture of the abilities of American students in each of the three processes of music assessed.

Patterns of Student Performance

Responding

As called for in the assessment framework, the music assessment tasks measuring students' Responding abilities included a wide range of musical stimuli, item types, and content areas.

- The results of student responses to Responding questions in the music assessment indicated that most eighth-grade students were able to distinguish phrases as being the same as or different from one another, could identify the timbres of some solo instruments, and were able to perceive the contour of a short melodic phrase. Students also tended to do well on simple questions asking about the functions of music in society. For example, 79 percent of students were able to identify part of a phrase from "Au Clair de la Lune" as moving in a pattern of "steps going down," and 66 percent of students were able to identify the sound of an unaccompanied melody as being played on a saxophone. Ninety percent of students could provide one way music is used in movies and television shows.
- Some students were able to successfully answer questions dealing with topics such as describing characteristic features of a spiritual, interpreting musical notation, and writing a critique of a musical performance. For example, 52 percent of students could identify a half note, 45 percent could supply at least two specific errors heard in a performance of "Michael Row the Boat Ashore," 32 percent could label all of the notes of a C major scale in the treble clef, and 20 percent of students could identify the term for a piano dynamic marking and give its meaning. Ten percent of students could describe a specific characteristic stylistic feature heard in "Wade in the Water."

Creating

Students participating in the music assessment were asked to engage in several Creating activities in music, including writing an ending to a rhythmic phrase, creating a rhythmic embellishment based on a familiar tune, developing an original melody, and participating in improvisation activities.

- While performing a rhythmic improvisation for the tune "The Lion Sleeps Tonight," 12 percent of the students scored at the Developed level in their ability to play in rhythm with the background music. Twenty percent of the students were able to create a rhythmic improvisation judged Adequate or above in overall interest and appeal. Twenty-four percent of the students were able to create a rhythmic embellishment on the first two phrases of the tune "Ode to Joy" scored Adequate or above in interest and appeal.
- In the "Rock Improvisation" set of exercises, 39 percent of the students were able to play in rhythm with the background music at the Developed level. Thirty-five percent of the students were able to create keyboard improvisations judged Adequate or above in interest and appeal. When performing vocal improvisations, 47 percent of the students were able to perform in rhythm with the background music at the Developed level, while 4 percent were able to sing in the key of the background music at the Developed level. Thirteen percent of the students were able to create vocal improvisations that were at or above the Adequate level

in terms of overall interest and appeal.

Many students showed a lack of ability to appropriately evaluate and discuss their creative activities. After completing the creative activities dealing with the rock music idiom, students completed two written self-evaluation questions. For these questions, 12 and 14 percent of students, respectively, received the highest score (Level 3: Adequate).

Performing

In the NAEP music assessment, the Performing skills of the general student population were measured by asking students to play familiar tunes by ear on the MIDI keyboard and to sing the song "America" with audiotape accompaniment.

- On the tune "Ode to Joy," 21 percent of the students were able to perform the pitches by ear accurately at the Adequate level or above, and 17 percent of the students were able to perform the rhythms by ear accurately at the Adequate level or above.
- On the tune "Twinkle, Twinkle, Little Star," 25 percent of the students performed the pitches at an Adequate level or above, and 26 percent performed the rhythms at an Adequate level or above.
- When asked to sing "America," the respective percentages of students performing at or above the Adequate level were 35 percent for Pitch, 24 percent for Tone Quality, and 52 percent for Diction. For Rhythm and Expression, which were scored using three-level guides, the respective percentages of students at or above the Limited level were 78 and 51.

The Relationship Between Background Variables and Student Performance

Although the results of the NAEP background questionnaires cannot be used to infer causal relationships, these data provide useful information about patterns of student performance and how they relate to various student characteristics.

In general, higher student proficiency in music Creating and Performing was associated with several in-school and out-of-school musical activities, such as enrollment in a school music ensemble, taking private lessons, listening to recordings out of school, reading books about music, and attending concerts and performances.

Many of the patterns observed in music Creating and Performing scores were also observed for music Responding.

Students whose Responding scores were in the upper level of the scale reported significantly higher rates of participation than students in the lower level of the scale for many in-school and out-of-school musical activities. Examples of the activities included participation in both in-school and out-of-school music ensembles, and enrollment in private lessons.

Some instructional practices within school music classes were also associated with higher scores in music Creating and Performing, although not all patterns were consistent and not all in-class musical activities were associated with higher proficiency. Students who were in classes in which the teacher asked them to sing almost every day scored higher in music Creating than all other groups of students whose teachers asked them to sing less frequently. A similar pattern was observed for students whose music teachers asked them to play instruments almost every day. Within school music classes, no patterns of increased proficiency in Creating were observed with regard to the frequency with which music teachers asked students to write music down or to make up their own music.

Some relationships between in-school music activities and assessment performance were also observed in the area of music Performing. Students whose teachers asked them to play instruments every day scored higher in music Performing than all other groups of students. Students whose teachers asked them to sing almost every day scored higher in music Performing than students not enrolled in a music class.

Chapter Three

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Chapter Three

Creating/Performing and Responding in Theatre: A Close Look at the NAEP 1997 Theatre Assessment

The Content of the Theatre Assessment

Many students receive little exposure to theatre in school. Those students who do engage in theatre-related activities in school do so primarily by reading the texts of plays in literature classes, and attending occasional school performances.[1] According to the *Standards for Education in the Arts* and the *NAEP Arts Education Assessment Framework*, an in-depth familiarity with and understanding of plays, films, and other theatrical media based on reading and viewing are crucial aspects of a theatre education. But this is only part of what students must learn.

As expressed in these documents, theatre is a social art form, bringing together people and ideas in the interactions of performers and audiences. This means that learning how to work with others to communicate ideas and feelings to audiences is central to the art of theatre. To teach students this art, theatre education must emphasize the "doing" of theatre: that is, Creating and Performing.[2]

Students who learn how to Create and Perform have a unique opportunity to combine emotion, physical activity, and intellect. Since students need to make many choices and judgments when, for example, designing a stage set or developing a character for a performance, analysis and problem solving are as much a part of Creating and Performing as they are of reading dramatic works and viewing performances.

The *Assessment Framework* outlined what students should be asked to do to demonstrate their abilities to Create, Perform, and Respond in theatre. Following the *Framework* closely, the NAEP theatre assessment was built around these three processes. (Given that Performing in theatre is the concrete result of Creating, the arts framework and assessment treated them as a single combined category.) While Creating and Performing in the assessment, students showed their abilities to collaborate to create dramatizations, develop scenarios and characters for performance, and make design and technical choices to communicate locale and mood. While Responding as audiences, they judged and described the artistic choices found in performances. Students evaluated their own work and the work of others, making judgments about characters, environments, and actions. This included exploring the elements of film, such as composition, camera movement, and sound. Students also demonstrated their knowledge of the cultural and historical contexts of theatrical works by identifying and analyzing styles and genres of those works. Responding exercises included both constructed-response (written) questions and multiple-choice questions.

1 National Endowment for the Arts. (1988). *Toward civilization: A report on arts education.* Washington, DC: U.S. Government Printing Office.

2 California Department of Education. (1993). *Prelude to performance assessment in the arts (Kindergarten through grade 12).* Sacramento, CA: Author.

Creating the theatre assessment presented several interesting challenges. In educational settings, students and teachers of theatre can discuss and experiment with the range of choices students can make to communicate meaning to audiences, such as how to use voice and action to convey a character. This is not the case in a timed assessment. To give students as much of an opportunity as possible to demonstrate their theatre knowledge and skills, it was necessary to create context for the assessment exercises. This was done in two important ways. First, instructions for Creating/Performing tasks were carefully crafted to lead students through complex exercises step by step, and to give students as much information as possible about what they were being asked to demonstrate. In this way, the theatre assessment attempted to avoid asking students to Create and Perform in a conceptual vacuum. At the same time, instructions were designed not to "overteach" students, and hence damage assessment results. Second, both Creating/Performing and Responding exercises were built around a theme or particular play, film, or audio stimulus, so that students could focus on just a single work or issue. This gave students the opportunity to think more deeply about the assessment tasks, and ensured that students were not asked isolated questions about unrelated works.

An additional challenge relates to the relative lack of comprehensive theatre programs in schools. Most students receive at least some in-school visual arts and music instruction, but this is not the case in theatre. To avoid testing students on content that they had not had an opportunity to learn, NAEP sampled students who had received theatre instruction in school. Specifically, schools offering at least 44 classroom hours of a theatre course per semester, and offering courses including more than the history or literature of theatre, were identified. Students attending these schools who had accumulated 30 hours of theatre classes by the end of the 1996-1997 school year were selected to take the theatre assessment. Readers should understand that the student results discussed in this chapter refer to this "targeted" theatre sample, not to the population of eighth graders as a whole.

It should be noted that a number of the schools initially contacted for the theatre assessment chose not to participate. Furthermore, within those schools a number of students eligible for the assessment declined to participate or were unavailable for the assessment on the day it was administered. As a result, school and student participation rates for the theater sample were below those typically obtained in NAEP and were substantially lower than the participation rates achieved in music and visual arts. Analyses presented in Appendix A suggest that the participating schools were reasonably similar to the full sample of schools on a number of important demographic characteristics. However, because of these lower participation rates the possibility of nonresponse bias —patterns of results for the theatre sample that may have differed from those for a full sample—cannot be ruled out.

An overview of the grade 8 theatre assessment "blocks" (a group of exercises administered as separate units to be completed in a set time frame) is presented below in Figure 3.1. As shown in the figure, the assessment consisted of seven blocks. Four of those blocks featured Responding exercises. These were multiple choice and constructed-response questions asking students to analyze, describe, and identify different aspects of theatrical works and performances. In most cases, students wrote answers to constructed-response questions. In some cases, students drew responses, as when they were asked to design a costume.[3] The four Responding blocks include stimulus works that represent different cultures, genres, and historical periods.

The remaining three blocks consisted of Creating/Performing exercises asking students to act in improvisations, and to do a cold reading of a script.

3 Questions asking students to describe and/or draw stage sets and costumes can be seen as Creating tasks. However, for ease of reference, the first four blocks of the theatre assessment will be referred to as Responding blocks, even though they contain exercises that combine Responding and Creating.

Figure 3.1 **The Content Description of the NAEP Theatre Assessment**

Block Name	
"Bug Pleasing" (Responding block)	Students listen to a short radio play called *Bug Pleasing*. They analyze the radio play, applying their knowledge of theatre elements such as character, set, and sound. In addition to writing responses, they are asked to draw costumes for a selected character in the radio play.
"McCullers" (Responding block)	Students read a portion of Carson McCullers' play, *Member of the Wedding*. They analyze the script, applying their knowledge of theatre elements such as character, set, and lighting. They are asked to think like directors and make directorial choices for a selected character. In addition to writing responses, they are asked to draw a stage set for a production of the script.
"1,000 Cranes" (Responding block)	Students listen to a short play called *1000 Cranes*, set in Japan. After analyzing the characters in the play, they are asked to write an alternative ending to the piece, and then to critique their own artistic choices.
"Jezebel" (Responding block)	Students watch a short scene from the movie *Jezebel*, both without and with sound. They are asked to consider how characters use movements and gesture to convey meaning, and how sound adds to the scene. They also are asked to compare the composition of the film with that of a play. Students then view a small portion of the film *Meet Me In St. Louis*, and are asked about set, genre, character, and sound.
"Camping" (Creating/Performing block)	Four students are assigned roles, and are asked to improvise a short scene about a strange noise they hear on a camping trip. After a brief preparation time, they are asked to perform their improvisation for a video camera. Students then answer a series of questions about the choices they made in their own performances.
"Chocolate" (Creating/Performing block)	Two students are asked to do a cold reading of a short script about two siblings and a box of chocolate. After a brief preparation time, during which they read the script and rehearse quickly with one another, they are asked to perform their reading for a video camera. Students then answer a series of questions about the choices they made in their own performances.
"Improv/Props" (Creating/Performing block)	Three students are given a short, non-linear script, and are asked to create a short scene using the script. After a brief preparation time, during which they read the script and rehearse quickly with one another, they are asked to perform their scene for a video camera. Students then answer a series of questions about the choices they made in their own performances.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Sample Responding and Creating/Performing Blocks and Exercises

In Parts 1 and 3 of this chapter, the different components of the theatre assessment will be examined to provide more detailed information about what students know and can do when they are asked to Create, Perform, and Respond in theatre. Part 1 includes Figures 3.2 to 3.5, which feature the four theatre Responding blocks. (Figures 3.3 to 3.5 are found on the CD-ROM version of this report.) Part 3 includes Figures 3.6 to 3.8, which feature the three theatre Creating/Performing blocks. (Figures 3.6 to 3.8 are found on the CD-ROM version of this report.)

Each figure includes either the whole of a theatre block or selected exercises from a block. The figures demonstrate how exercises were organized and presented to students, how Creating exercises were combined with Performing and Responding exercises, and how well students performed on the exercises. Many sample student responses will be shown, to give a detailed picture of the range of student abilities. Percentages of students choosing the correct answer for multiple-choice questions, or at the different levels in a constructed-response question scoring guide, are also featured. Parts 2 and 4 of this chapter examine overall summaries of Responding and Creating/Performing results, respectively, and their relationships to student-reported background variables.

Part One

Sample Questions from the Theatre Responding Blocks

Figure 3.2 **Sample Questions and Student Responses from the "Bug Pleasing" Block are found on the CD-ROM version of this report.**

THE NATION'S REPORT CARD naep

As described in Figure 3.3, in this block students read a portion of Carson McCullers' play, *Member of the Wedding*. They analyze the script, applying their knowledge of theatre elements such as character, set, and lighting. They are also asked to make directorial choices for a selected character. In addition to writing responses, students draw a stage set for a production of the script.

Part of the initial directions students were given and the script from *Member of the Wedding* are shown at the right.

Figure 3.3 **Sample Questions and Student Responses from the "McCullers" Block (This figure can also be found on the CD-ROM version of this report.)**

THE NATION'S REPORT CARD naep

The play is called *Member of the Wedding* and is by Carson McCullers. The play is set in the South during the 1940's. It is about a 13-year-old girl named Frankie who has been very upset about the fact that her older brother is about to get married and move away.

(1) FRANKIE [still looking at her suitcase]: That's my suitcase I packed. If you think it's all over, that only shows how little you know. [T.T. comes in.] If I can't go with the bride and my brother as I was meant to leave this town, I'm going anyway. Somehow, anyhow, I'm leaving town. [Frankie rises up in her chair.] I can't stand this existence, this kitchen, this town any longer! I will hop a train and go to New York. Or hitch rides to Hollywood, and get a job there. If worse comes to worse, I can act in comedies. [She rises.] Or I could dress up like a boy and join the Merchant Marines and run away to sea. Somehow, anyhow, I'm running away.

(2) BERENICE Now quiet down.

Member of the Wedding: Courtesy of the Bettman Archive

70

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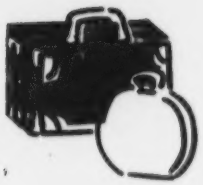


(3) FRANKIE [grabbing the suitcase and running into the hall]: Please, Papa, don't try to capture me.

[Outside the wind starts to blow.]

(4) JOHN HENRY [from the doorway]: Uncle Royal, Frankie's got your pistol in her suitcase.

[There is the sound of running footsteps and of the screen door slamming.]

(5) BERENICE: Run, catch her.

[T.T. and Mr. Addams rush into the hall, followed by John Henry.]

(6) MR. ADDAMS' VOICE: Frankie! Frankie! Frankie!

[Berenice is left alone in the kitchen. Outside the wind is getting stronger and the hall door is blown shut. There is a rumble of thunder, then a loud clap. Thunder and flashes of lightning continue. Berenice is seated in her chair when John Henry comes in.]

(7) JOHN HENRY: Uncle Royal is going with my Daddy, and they are chasing her in our car. [There is a thunder clap.] The thunder scares me, Berenice.

(8) BERENICE [taking him in her lap]: Ain't nothing going to hurt you.

(9) JOHN HENRY: You think they're going to catch her?

(10) BERENICE [putting her hand to her head]: Certainly. They'll be bringing her home directly. I've got such a headache. Maybe my eye socket and all these troubles.

(11) JOHN HENRY [with his arms around Berenice]: I've got a headache, too. I'm sick, Berenice.

(12) BERENICE: No you ain't. Run along, Candy.* I ain't got the patience to fool with you now.

[Suddenly the lights go out in the kitchen, plunging it in gloom. The sound of wind and storm continues and the yard is a dark storm-green.]

(13) JOHN HENRY: Berenice!

(14) BERENICE: Ain't nothing. Just the lights went out.

(15) JOHN HENRY: I'm scared.

(16) BERENICE: Stand still, I'll just light a candle. [Muttering] I always keep one around, for such like emergencies. [She opens a drawer.]

(17) JOHN HENRY: What makes the lights go out so scary like this?

(18) BERENICE: Just one of them things, Candy.

(19) JOHN HENRY: I'm scared. Where's Honey?**

(20) BERENICE: Who knows? I'm scared, too. With Honey crazy and loose like this—and Frankie run off with a suitcase and her papa's pistol. I feel like every nerve been picked out of me.

(21) JOHN HENRY [holding out his seashell and stroking Berenice]: You want to listen to the ocean?

[The curtain falls.]

* "Candy" is John Henry.
** "Honey" is Berenice's nephew.

Sample Question 1 (Item 1 in Block)

Beginning with multiple choice questions that required students to scan the script was a means of creating context for the rest of the exercises. This question measures students' abilities to analyze a script for technical information relevant to creating an environment on stage. The question was scored either correct or incorrect. The correct answer is A.

Based on the script, which of the following objects are necessary for the scene?

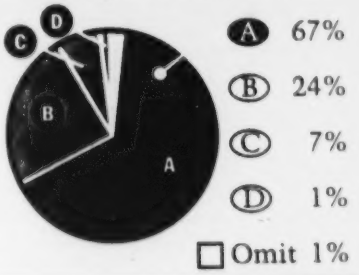
(A) Suitcase, chair, drawer, seashell

(B) Car, screen door, candle, pistol

(C) Car, suitcase, bride's dress, couch

(D) Couch, lamp, table, umbrella

Percentage of Eighth Graders Answering Correctly: 67%



NOTE: The omit percentage reported includes student refusals, blank or multiple responses, and illegible or otherwise unscorable responses.

Sample Question 2 (Item 2 in Block)

This question measures students' abilities to analyze a script for technical information relevant to costuming. The question was scored either correct or incorrect. The correct answer is B.

Which of the following is NOT information that could be shown through the costumes in the play?

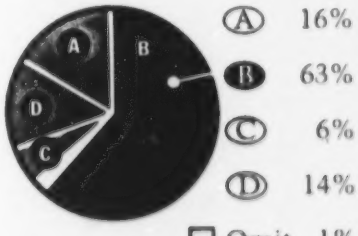
(A) How wealthy the characters are

(B) How much the characters like each other

(C) What time period the play is set in

(D) How hot or cold it is where the characters are

Percentage of Eighth Graders Answering Correctly: 63%

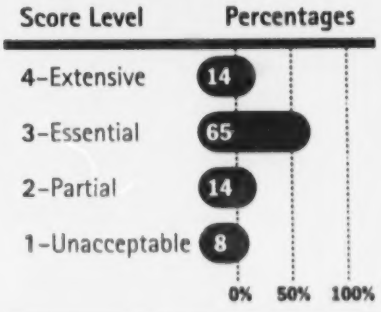


NOTE: The omit percentage reported includes student refusals, blank or multiple responses, and illegible or otherwise unscorable responses.

Sample Question 3 (Item 3 in Block)

This extended constructed-response item measures students' abilities to analyze a script for technical information relevant to lighting, and then to apply that analysis to creating an effect on stage. Responses were scored with a four-level scoring guide that allowed for two levels of partial credit. The sample student responses below represent a Partial score, an Essential score, and the highest score, Extensive.

Percentage of Eighth Graders Receiving Various Scores



NOTES: Percentages do not sum to 100 due to rounding.

Of the 8 percent of student responses in the lowest score level, 1 percent consists of omits and otherwise unscorable responses.

Sample Student Response Receiving a Score of Partial

Identify two places in the script where special lighting is necessary. Write the line numbers of these places below.

Line # : 12

Line # : 14

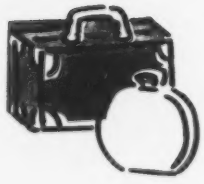
Describe the kind of light that is appropriate for each place you have identified.

12 would need something like thunderstorms

14 would have lights out.

Explain specifically how one of the kinds of light you described would be created for a stage play.

Just make it dark. you do this bt turning off the lights.



Partial. Students at level 2 showed an ability to accurately read the script but often proposed plans that were vaguely stated or problematic. "Turning off the lights" indicates a lack of knowledge about how to create specific lighting effects, and a lack of thought about how the actors will see on a dark stage.

Sample Student Response Receiving a Score of Essential

Identify two places in the script where special lighting is necessary. Write the line numbers of these places below.

Line # : 12

Line # : 6

Describe the kind of light that is appropriate for each place you have identified.

In 12 the lights go out suddenly. In 6 the lights flash to make bright it look like a lightning storm.

Explain specifically how one of the kinds of light you described would be created for a stage play.

In twelve the lights shald be cut at quickly.

Essential. Students at the Essential level gave responses that were somewhat more specific and that showed more understanding of how to create lighting effects. This student includes a general plan in the description area of the response, referring to flashing the lights to create a lightning effect for line 6 of the script.

Sample Student Response Receiving a Score of Extensive

Identify two places in the script where special lighting is necessary. Write the line numbers of these places below.

Line # : 12

Line # : 6

Describe the kind of light that is appropriate for each place you have identified.

For line 12 the lights must be dimmed almost to where it is completly dark, but there needs to be light for the actors to see. On line 6 I would use a strobe light to represent lightning

Explain specifically how one of the kinds of light you described would be created for a stage play.

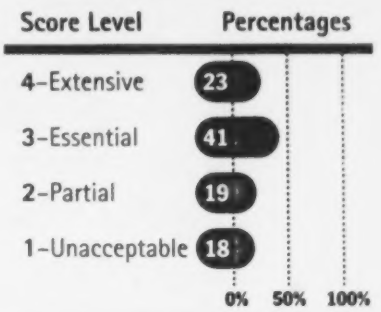
On line 6 I would put two strobe lights on each side of the stage backstage and turn them on and off during that specific time.

Extensive. Students at the highest level gave responses that showed a good understanding of stage lighting and occasionally used theatre-specific vocabulary. This student shows a good grasp of technical theatre. The student suggests dimming lights for line 12 but, unlike lower-level responses, knows that the actors must be able to see on a dim stage. The student also knows where to locate strobe lights and how to use them to create a lightning effect.

Sample Question 4 (Item 5 in Block)

This extended constructed-response item measures students' abilities to make directorial choices. Students are asked to imagine that they are directing the scene in the script, and to focus on how they would utilize the script to direct the actress playing Frankie to use her body, face, and voice to convey her character. Responses were scored with a four-level scoring guide that allowed for two levels of partial credit. The sample student responses below represent a Partial score, an Essential score, and the highest score, Extensive.

Percentage of Eighth Graders Receiving Various Scores



NOTES: Percentages do not sum to 100 due to rounding.

Of the 18 percent of student responses in the lowest score level, 3 percent consists of omits and otherwise unscorable responses.

Sample Student Response Receiving a Score of Partial

Now turn back to page 2 and reread lines 1-6 in the script. As you read, focus on the character of Frankie. Imagine that you are directing your own production of this scene.

Think about the character of Frankie. Based on Frankie's lines and the stage directions, what would you want the actress playing Frankie to communicate through her body, face, and voice?

Describe in detail how you would have the actress playing Frankie use her body, face, and voice to communicate what her character is like and how her character is feeling to an audience. Make specific references to the script to support and explain your ideas.

Body:

Thin and dark skinned.

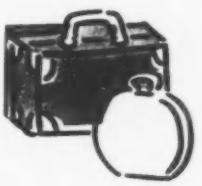
Face:

Puzzled, thoughtful.

Voice:

High but very soft.

Partial. While students at the Partial level were able to identify traits of Frankie's character, they often did not link those traits or feelings to the script in order to identify the motivation of the character. Further, the response "thin and dark skinned" suggests that the student does not understand what it means to direct the actress in terms of use of the body.



Sample Student Response Receiving a Score of Essential

Now turn back to page 2 and reread lines 1-6 in the script. As you read, focus on the character of Frankie. Imagine that you are directing your own production of this scene.

Think about the character of Frankie. Based on Frankie's lines and the stage directions, what would you want the actress playing Frankie to communicate through her body, face, and voice?

Describe in detail how you would have the actress playing Frankie use her body, face, and voice to communicate what her character is like and how her character is feeling to an audience. Make specific references to the script to support and explain your ideas.

Body:

The actress playing frankie would be slim with long brown hair. She would be wearing a 3/4 dress and brown horn rimmed glasses.

Face:

Frankies face would be stern because she knows what she is doing.

Voice:

Frankies voice would be loud and stern she knows what she is doing so she must sound confident and certain

Essential. Students at the Essential level gave responses that showed more perception of the relationship between Frankie's lines in the script and what the actress ought to do to convey those lines. However, their responses were fairly general. This student also does not understand what is meant by directing the actress to use her body to convey her character.

Sample Student Response Receiving a Score of Extensive

Now turn back to page 2 and reread lines 1-6 in the script. As you read, focus on the character of Frankie. Imagine that you are directing your own production of this scene.

Think about the character of Frankie. Based on Frankie's lines and the stage directions, what would you want the actress playing Frankie to communicate through her body, face, and voice?

Describe in detail how you would have the actress playing Frankie use her body, face, and voice to communicate what her character is like and how her character is feeling to an audience. Make specific references to the script to support and explain your ideas.

Body:

she must make bold gestures to indicate her superiority to all the other characters

Face:

an angry face as if she had taken the stern expression from an older man her lip pointed out and her chin wrinkled also her eyebrows knitted.

Voice:

yelling very bellowing like. And she attempts to sound like a gruffman.

Extensive. High-level responses such as this one demonstrate a relatively clear understanding of what it means to direct an actor to use his or her body, face, and voice. The student refers to bold gestures to show Frankie's sense of superiority and is quite specific about how the actress ought to use her face to convey anger. The quality of most responses suggested that students had had little exposure to directing.

Sample Question 5 (Item 7 in Block)

This extended constructed-response item measures students' abilities to make design choices to communicate mood and locale to an audience. Again, students are asked to imagine that they are directing the scene, but this time they are to determine how to create a set that will capture the scene's mood. Responses were scored with a four-level scoring guide that allowed for two levels of partial credit. The sample student responses below represent a Partial score, an Essential score, and the highest score, Extensive.

Percentage of Eighth Graders Receiving Various Scores

Score Level	Percentages
4-Extensive	3
3-Essential	19
2-Partial	69
1-Unacceptable	10

0% 50% 100%

NOTES: Percentages do not sum to 100 due to rounding.

Of the 10 percent of student responses in the lowest score level, 2 percent consists of omits and otherwise unscorable responses.

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Sample Student Response Receiving a Score of Partial

Imagine you were directing a production of the play. What mood would you want the set for this scene to communicate to the audience?

I would want to set a unhappy mood because Freddie would be mad, and everyone else sad, and scared.

Describe what you would want the set to look like in order to create this mood. Be specific about the details you would include, and explain how the set and details would contribute to the mood.

I would have Freddies mom looking depressed, and laying her head on the table. Everybody else would be looking at the ground, with a sad or scared look on their face. John Henry would have this little scared or frighten look on his face.

Partial. Students at this level either listed set elements for a kitchen with little attention to mood, or if they understood the mood, as shown in this response, they did not demonstrate an understanding of set elements. This student confuses creating a stage set with positioning the actors on the stage.

Sample Student Response Receiving a Score of Essential

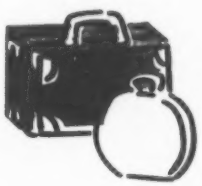
Imagine you were directing a production of the play. What mood would you want the set for this scene to communicate to the audience?

The scene is supposed to be very sad, morose, gloomy. Even a little spooky because of the storm.

Describe what you would want the set to look like in order to create this mood. Be specific about the details you would include, and explain how the set and details would contribute to the mood.

The lighting should be dim. The furniture in very old and dingy. Dark colors would be in the set - nothing bright.

Essential. As with many responses at the level, the mood is accurately identified and an accurate but general description of some set elements is offered.



Sample Student Response Receiving a Score of Extensive

Imagine you were directing a production of the play. What mood would you want the set for this scene to communicate to the audience?

a somber almost scary scene indicating the child has left and there is worry

Describe what you would want the set to look like in order to create this mood. Be specific about the details you would include, and explain how the set and details would contribute to the mood.

dirty pots and dishes etc: neglect
Wilted dried flowers - in ~~happy~~ time happy times forgotten
Simple house. Not elaborate
Flowered wall paper w/ small flowers that are earthy hues.
Natural wood paneling beige tile floors large tile a glass lamp hanging above the table with a checkered tablecloth. Leaky roof metal pots used to catch water. Water stains on ceiling. Cracked wall, Black telephone w/no stand. Dead tree outside window.

Extensive. This student shows an impressive grasp of both mood and how to convey it. The student supplies a thorough list of set elements that even includes a reference to what the audience would be able to see outside the kitchen window. Set choices like wilted flowers and dirty dishes are connected to subtle moods, such as past happy times and current neglect. A small percentage of students received an Extensive score, indicating that the question was challenging for eighth graders.

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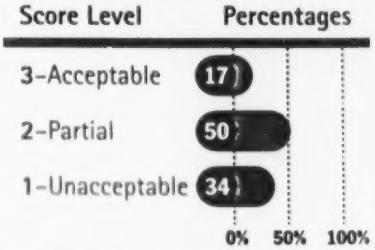
Sample Question 6 (Item 8 in Block)

After students wrote their set descriptions, they were asked to further demonstrate their stage-setting abilities by drawing a ground plan. Students were given specific directions to include and label off-stage areas and where the audience would sit. They were also instructed to include the elements called for in the script. They were supplied with graph paper to draw on. Responses were scored with a three-level scoring guide that allowed for partial credit. The sample student responses below represent an Unacceptable score, a Partial score, and the highest score, Acceptable.

Percentage of Eighth Graders Receiving Various Scores

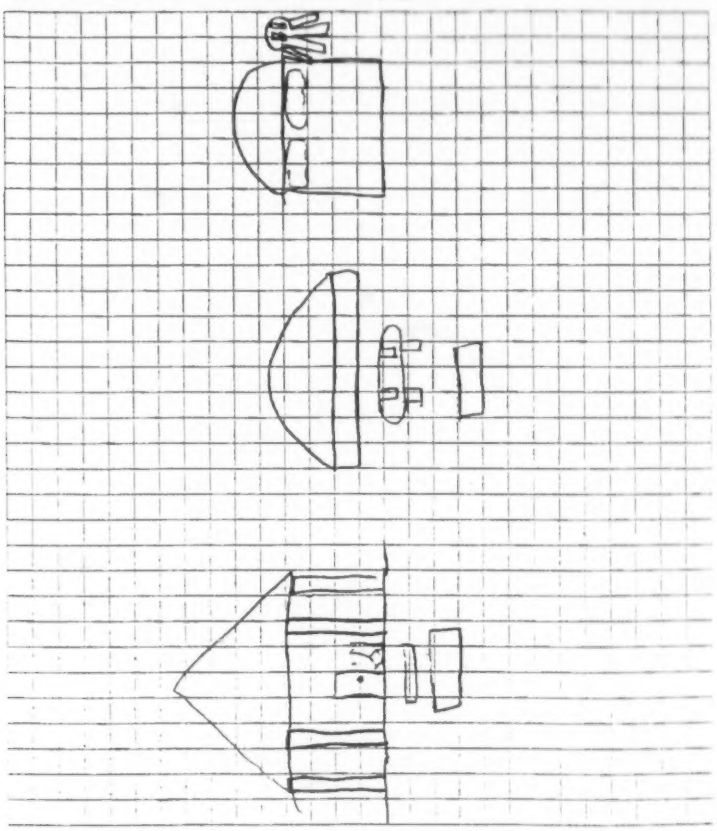


NOTES: Percentages do not sum to 100 due to rounding.

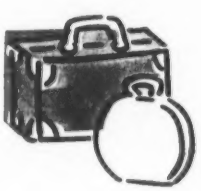
Of the 34 percent of student responses in the lowest score level, 9 percent consists of omits and otherwise unscorable responses.

Sample Student Response Receiving a Score of Unacceptable

Draw your ground plan for the set on this page.

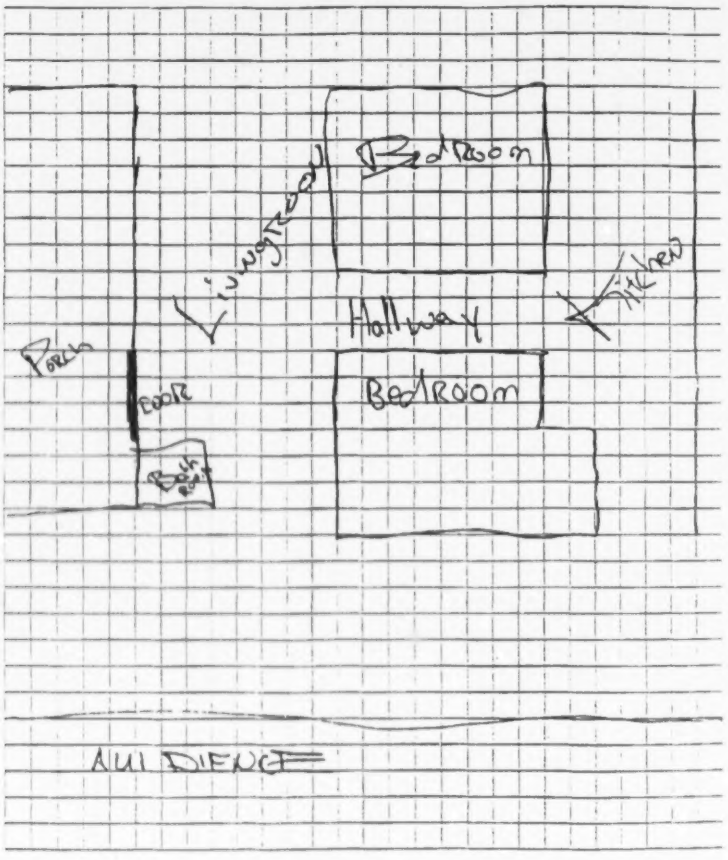


Unacceptable. Unacceptable responses such as this one indicated no understanding of a theatre space or of how to do a ground plan.



Sample Student Response Receiving a Score of Partial

Draw your ground plan for the set on this page.



Partial. Students at this level indicated some understanding of a theatre space but made a number of characteristic errors. Although this student attempts to create a full set, he or she does not realize that walls have been indicated that would block the view of the audience.

theatre

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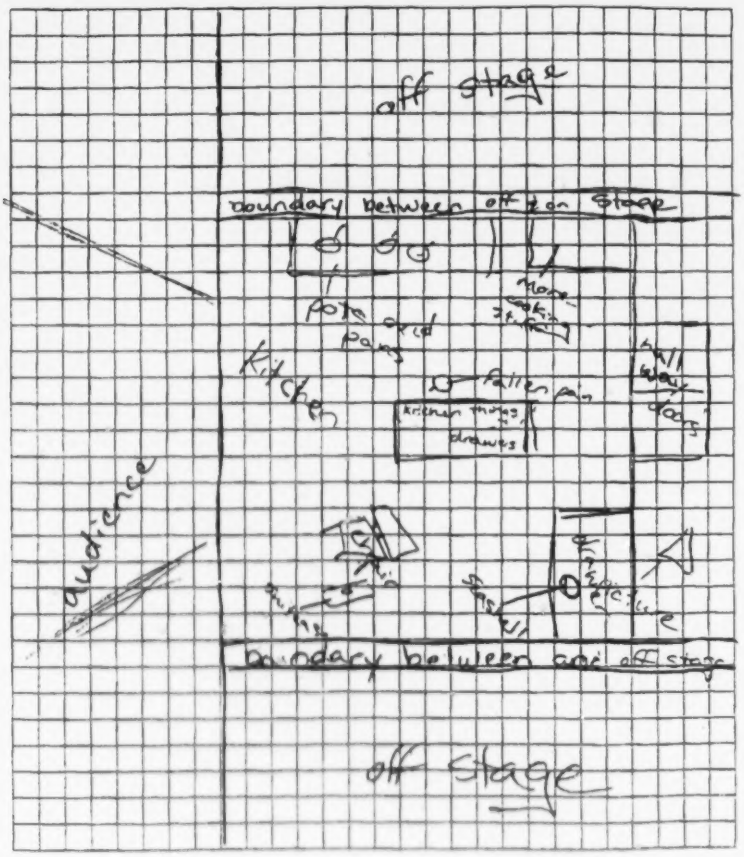
Sample Student Response Receiving a Score of Acceptable

Draw your ground plan for the set on this page.



Acceptable. The students that received this score showed a solid understanding of how to create a stage set and draw a ground plan. This students has, as required, correctly marked the off-stage areas and the area for the audience. Furthermore, he or she has understood that the scene is set in the kitchen, and supplied set pieces suitable for that room. Finally, the student has been careful to arrange the set so that the audience's view of the stage area and the actors would be quite clear.

Figure 3.4 **Sample Questions and Student Responses from the "1000 Cranes" Block are found on the CD-ROM version of this report.**

THE NATION'S REPORT CARD

Figure 3.5 **Sample Questions and Student Responses from the "Jezebel" Block are found on the CD-ROM version of this report.**

THE NATION'S REPORT CARD

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Part Two

The Theatre Responding Item Map and Student Profile

Reporting the Theatre Assessment Results

In this section, overall summaries of Responding results and their relationships to student-reported background variables are featured.

The overall summaries deal with Responding and Creating/Performing results separately. While the knowledge and skills students draw upon to Create, Perform, and Respond in theatre do overlap and inform one another, it is plausible that some students will Create and Perform but not Respond well, and vice versa. To do justice to differing abilities among students, results for Creating/Performing and Responding exercises are summarized separately.[4]

The Theatre Responding Scale

The theatre assessment measured students' Responding abilities with both short and extended constructed-response questions and multiple-choice questions. Item Response Theory (IRT) methods were used to produce a scale that summarizes the results from these questions.[5] The scale ranges from 0 to 300. Item Response Theory (IRT) is a set of statistical models useful in summarizing student performance across a collection of test exercises requiring similar knowledge and skills. In the context of the theatre assessment, IRT methods were used to create a summarizing scale that relates the probability of students doing well or badly on the theatre assessment Responding exercises to their general Responding abilities (abilities to analyze, describe, and interpret theatrical works).

To give meaning to the levels of the Responding scale, it is useful to illustrate the kinds of questions that students at particular scale score levels of performance can answer correctly. Figure 3.6 presents this illustration, called an "item map," for the Responding scale. An item map is a visual representation that compares questions with scale scores and indicates which kinds of questions students can likely answer correctly at each level on the scale. Constructed-response questions are shown in regular type and multiple-choice questions are shown on the item map in italics. The position of a constructed-response question on the item map represents the scale score attained by students who had at least a 65 percent probability of reaching a given score level on that question. The position of a multiple-choice question on the item map represents the scale score attained by students who had at least a 74 percent probability of correctly answering that question.

An example of how to interpret the item map may be helpful. On Figure 3.6, a four-option multiple-choice question about identifying objects necessary for a stage set based on a script maps at the 156

4. Furthermore, a measurement requirement for summarizing student responses to different exercises together is that those exercises measure the same or similar knowledge and skills. The range of theatre knowledge and skills is very wide. Knowledge and skills are also related in subtle and various ways in their applications to Creating/Performing and Responding. These factors diminish the possibility that the processes, in strict measurement terms, utilize knowledge and skills in ways similar enough to be summarized on a single scale.

5. A large number of these questions asked students to make creative choices for staging performances. While many of these exercises did fit on the Responding scale, some did not. Apparently, this group of questions was measuring knowledge and skills different from those being measured by other Responding exercises. This subset of exercises was therefore not included in the Responding scale, but in the overall summary of Creating/Performing results.

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Figure 3.6

Map of Selected Questions on the NAEP Theatre Responding Scale: Grade 8

300

Upper Level

(239) Explain purpose of title song in film *Meet Me in St. Louis*

(234) Explain two reasons for characters' use of humor in scene of play

(228) Describe how character in film *Jezebel* is feeling based on body movement and facial expression

(221) Specifically describe how to stage portion of radio play told by narrator

(218) Analyze how actor in radio play used voice to convey character

(217) Analyze importance of lead female's costume in film *Jezebel*

(214) Analyze why particular words and/or actions in own alternative ending for short play are good

(199) Identify and describe two decisions the director, cinematographer, set designer, or costume designer could have made for scene in film *Meet Me in St. Louis*

(178) Analyze how radio play theme music expresses mood of play

75th Percentile 175

Middle Level

(159) *Identify information not conveyed by costume in* Member of the Wedding *scene*

(156) *Identify objects necessary for set based on script*

(154) *Identify effect of camera shot in film* Jezebel

(150) Explain what own new ending written for short play shows about a character

(143) Generally describe how to stage portion of radio play told by narrator

(130) Describe prop for staging radio play for children

(130) Explain intended lesson of radio play

25th Percentile 127

Lower Level

(117) Identify and offer simple explanation for why particular words and/or actions in own alternative ending for short play are good

(114) *Identify what camera shots show about character in film* Meet Me in St. Louis

(112) Identify places in *Member of the Wedding* script where sound effects are necessary, and describe what sound effects are needed

(79) *Identify genre of film* Meet Me in St. Louis

(45) *Identify most likely location of radio play scene*

0

NOTE: Italic type indicates a multiple-choice question. Regular type indicates a constructed-response question.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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point on the scale. This means that students with theatre Responding scale scores at or above 156 were likely to answer this question correctly - that is, they have at least a 74 percent chance of doing so. Put slightly differently, this question was answered correctly by at least 74 of every 100 students scoring at or above the 156-scale score level. This does not mean that students at or above the 156 scale score always would have answered this question correctly, or that students below the 156 scale score always would have answered it incorrectly. Rather, the percentage of students who can successfully answer the question depends on their overall ability as measured on the theatre Responding scale.

As another example, consider the constructed-response question that maps at a scale score of 217 on Figure 3.6. This question asked students to analyze the importance of the lead female's costume for a scene in the film *Jezebel*. Scoring of responses to this question allowed for partial credit by using a three-level scoring guide. Mapping a question at the 217 scale score indicates that at least 65 percent of the students performing at or above this point were likely to have achieved a score of 3 ("Acceptable") on the question. Among students with lower scores, less than 65 percent were likely to have given acceptable responses to the question.

In Figure 3.6, there are two occasions when points on the Responding scale represent different scores achieved by students for the same question. For example, the exercise that maps at a scale score of 214 indicates that at least 65 percent of students performing at or above this point were likely to have been able to analyze the good qualities of words and/or actions in an alternative ending they wrote for a script. Hence, these students were likely to have achieved a score of 3 for this exercise. However, at the 117 point on the scale, a lower score of 2 for the same question is represented; i.e., at least 65 percent of the students performing at or above 117 on the Responding scale were likely to have been able to identify what was good about their alternative endings and offer a simple explanation as to why (versus an analysis).

The Theatre Responding Item Map

As explained above, the NAEP theatre scale, ranging from 0 to 300, summarizes the overall Responding score results of students. The following descriptions of students' Responding knowledge and skills in theatre are based on sets of questions that were answered successfully by students performing within three ranges on the scale. These ranges represent lower-, middle-, and upper-level performances based on percentiles.[6] (These ranges are also visually represented on the item map in Figure 3.6.)

6 A percentile is a scale location below which a specified percentage of the population scored. For example, the 25th percentile as given in Figure 3.6 is 127. Twenty-five percent of students had scale scores lower than 127. Similarly, the 75th percentile as shown in Figure 3.6 is 175. Seventy-five percent of the students had scale scores lower than 175. Equivalently, 25 percent of the students had scale scores at or above 175.

Students in the Lower Range of the Responding Scale

Students who were in the lower range of the theatre Responding scale (points 0 to 127) were able to make simple inferences based on visual (film) and aural (audiotape) information about character and location. They showed sufficient knowledge to identify appropriate sound effects needed for the staging of a short script and displayed a rudimentary understanding of the purpose of the title song in the film *Meet Me in St. Louis*. They were also able to identify the genre of that film. They demonstrated an initial understanding of what was good about an alternative ending they were asked to write for a short play.

Students in the Middle Range of the Responding Scale

Students who were in the middle range of the theatre Responding scale (points 128 to 175) were able to make inferences based on scripts, film, and audiotape about props and costumes necessary for staging performances. They were able to explain the intended lesson of a radio play, describe in general terms how to stage a portion of that play told by a narrator, and show an initial understanding of how an actor in that play used his voice to convey character. They also demonstrated an ability to explain what an alternative ending they were asked to write for a short play communicated about one of the characters. These students were able to identity the effect of a camera shot in the film *Jezebel*, and showed some understanding of how the characters in that film used action and facial expression to convey feeling.

Students in the Upper Range of the Responding Scale

Students who were in the upper range of the theatre Responding scale (points 176 to 300) were able to make complex inferences based on scripts, film, and audiotape about character, set, and costume. They demonstrated an ability to analyze and explain the suitability of the theme music for a radio play, how to stage a portion of that play told by a narrator, and how an actor in that play used his voice to convey character. They were able to analyze why particular words and/or actions in an alternative ending they were asked to write for a short play were good, and to explain the use of humor in that play. Students in the upper range could also analyze the importance of the lead female's costume in *Jezebel*, and how characters in that film used action and facial expression to convey feeling. Additionally, these students were able to explain what elements made a scene in another medium similar in mood to a scene from Carson McCuller's play *Member of the Wedding*.

Profile of Students' Theatre Experiences

Figure 3.7 provides some context for understanding the range of student performance represented on the item map and described above, by "profiling" students who fell into the lower, middle, and upper ranges on the theatre Responding scale.[7] The profile represents these students in terms of their own descriptions of their theatre studies. As part of the NAEP 1997 Theatre Assessment, students were asked a series of questions about the nature and extent of their theatre instruction, as well as their theatre-related experiences outside of school. The results of these questions provide a picture of the sorts of activities students do when learning and engaging in theatre.

An examination of the profile reveals a common pattern: in-school activity is positively associated with student performance. A significantly larger percentage of students in the upper level of the Responding scale had acted in live theatre productions in school and had received classroom instruction in acting than the percentages of students in the middle and lower levels of the responding scale. Also, for both

7 The lower group comprised students whose scores fell into the lowest 25 percent of the population. The middle group comprised students whose scores fell into the middle 50 percent of the population. The upper group comprised students whose scores fell into the highest 25 percent of the population.

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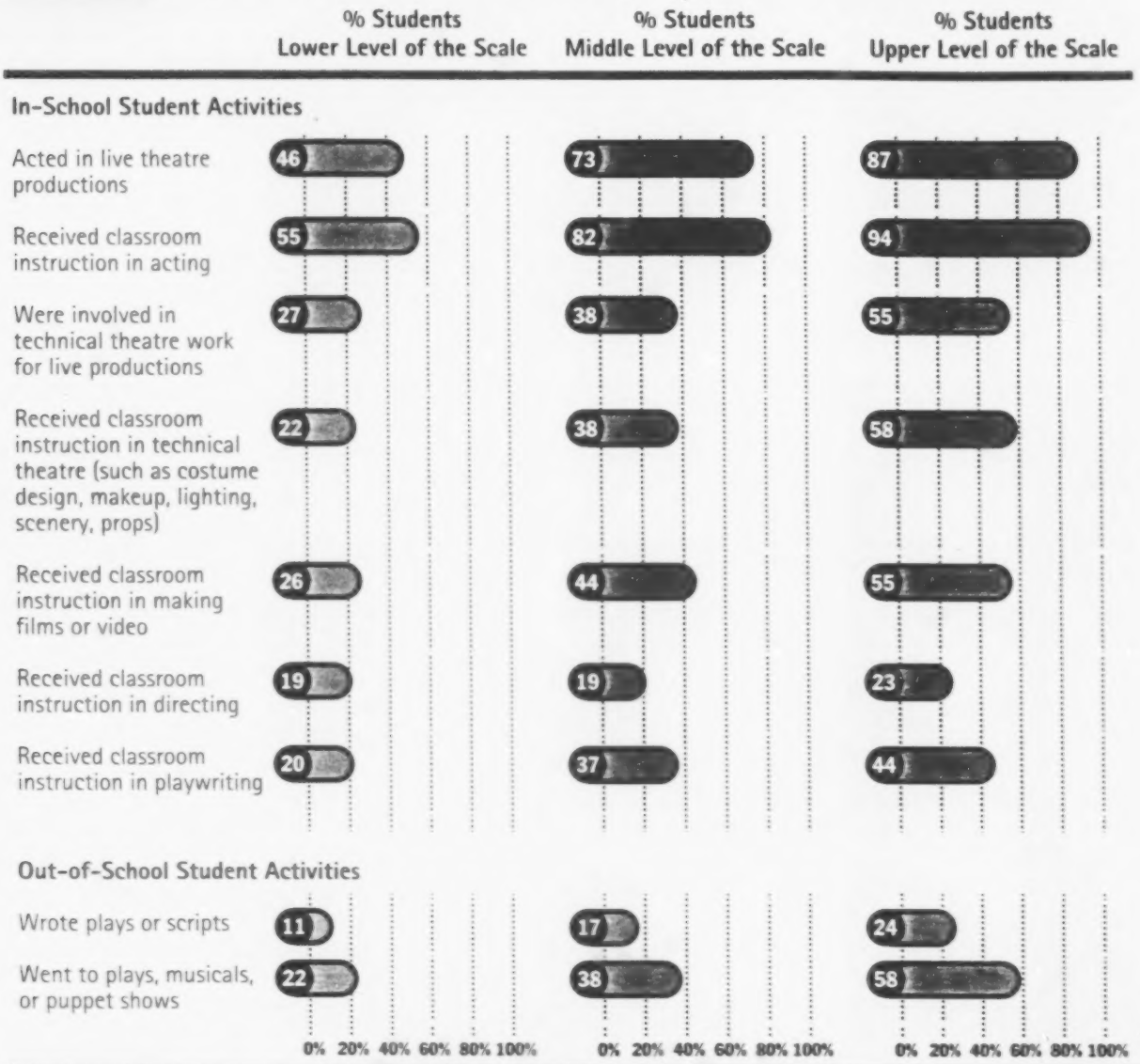
variables, the percentage of students in the middle level of the scale was significantly larger than the percentage of students in the lower level of the scale. Similarly, the percentages of students in the upper level of the scale involved with technical work in live theatre productions in school, and who had received classroom instruction in technical theatre, were significantly larger than the percentages of students in the lower level. Additionally, a significantly larger percentage of students in the middle level had received classroom instruction in technical theatre than the percentage of students in the lower level who had received such instruction. Finally, the percentage of students in the upper level who had received classroom instruction in making films or video was significantly larger than the percentage of students in the lower level of the Responding scale.

Interestingly, there were no significant differences among percentages of students in the lower, middle, and upper levels of the scale who had received classroom instruction in directing and playwriting. However, the percentage of students in the upper level who had written plays or scripts outside of school was significantly larger than that of students in the lower level of the scale. Finally, the percentage of students in the upper level who attended plays, musicals, or puppet shows on their own was significantly larger than the percentages of students in the lower and middle levels who attended these events on their own, as was the percentage of students in the middle level versus students in the lower level.

Figure 3.7 **Theatre Responding Profile of Percentages of Students in Lower, Middle, and Upper Levels of the Responding Scale, by Selected In- and Out-of-School Activities**



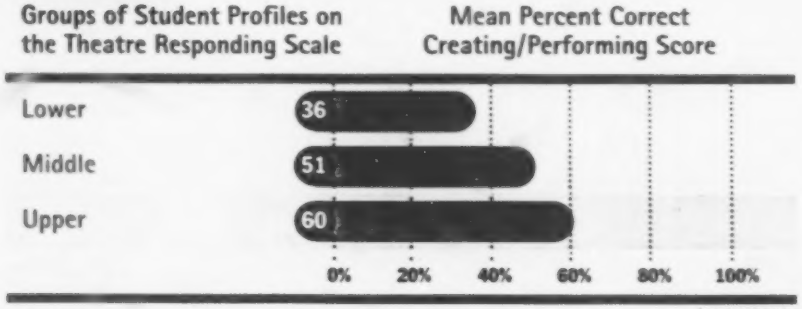
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Relationships Between Student Theatre Creating/Performing and Responding Results

As previously explained, results for student Creating/Performing and Responding are not summarized together. However, to explore potential relationships between student results for the different processes, the average Creating/Performing scores for students in the low, middle, and high ranges of the Responding scale are presented in Figure 3.8 below. As shown in the figure, there is a positive relationship between student performance on the Responding portion of the assessment and their Creating/Performing scores. Creating/Performing scores of students in the middle level of the Responding scale were significantly higher than scores of students on the lower level of the scale, and scores of students on the upper level of the Responding scale were significantly higher than scores of students on the middle and lower levels of the scale. This is interesting in light of the view that knowledge and skills necessary for Responding to theatre overlap with those necessary for Creating and Performing in theatre.

More detailed conclusions are not within the scope of this Report Card. Further research would be necessary to determine precisely how Creating/Performing and Responding abilities are related.

Figure 3.8 **Creating/Performing Mean for Lower, Middle, and Upper Responding Score Groups**



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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Part Three

Sample Tasks from the Theatre Creating/Performing Blocks

Students engaging in the Creating/Performing tasks were videotaped at the time of the assessment administration to allow for later scoring. To obtain permission to videotape grade 8 students, it was necessary to have parents of students sign release forms that affirmed that the videotapes would not be used for any purposes other than scoring. So as not to violate confidentiality, Educational Testing Service (ETS) hired a group of grade 8 students with backgrounds similar to those of the students in the special theatre sample. These students were carefully directed to capture the abilities of the students seen in the assessment.[8] Their performances were videotaped and can be viewed on the CD-ROM version of this *Report Card*. The descriptions of performances appearing on the CD-ROM refer exclusively to the students hired by ETS.

Their performances reflect both the weak and the strong Creating/Performing work seen in the assessment. As every attempt was made to replicate the nature of the performances seen in the assessment, explanations for scores should be understood to be generalizable to the students who took the assessment. Sometimes only portions of weaker performances are shown; readers should assume that these portions represent longer performances that did not change in quality. Samples of students' written self-evaluations of their performances are also shown on the CD. Since these were written by students videotaped during the assessment, they are not associated with the performances discussed in this report.

Students' performances for each task were measured with a number of scoring guides. Given the potential confusion resulting from describing the scores assigned to different students (each task included at least two students) for different scoring guides, tables are utilized to present scores students received and explanations for why those scores were assigned. The tables also describe what each scoring guide in a task was intended to measure.

One scoring guide in each task was intended to capture students' abilities to portray character. During the scoring of theatre Creating/Performing, there was a great deal of discussion with regard to the difficulty of defining "character." Trainers and raters needed to be reminded that the assessment was designed to focus on broad characters as they are created in improvisational performance and exercises. It would be very difficult to assess the often subtle characters called for in theatre in any standardized way. Readers are asked to keep in mind the challenge in making judgments about character when encountering scores assigned to students.

8 The students were hired and directed by a member of the Theatre Assessment Development Committee, a theatre teacher of secondary school students. This teacher is also the theatre consultant to the NAEP theatre assessment project and was responsible for the development of many exercises and all scoring guides appearing in the theatre assessment.

Figure 3.9 **Sample Questions and Student Responses from the "Camping" Block are found on the CD-ROM version of this report.**

Figure 3.10 **Sample Questions and Student Responses from the "Chocolate" Block are found on the CD-ROM version of this report.**

Figure 3.11

Sample Questions and Student Responses from the "Improv/Props" Block are found on the CD-ROM version of this report.

Part Four

Summarizing Theatre Creating/Performing Results

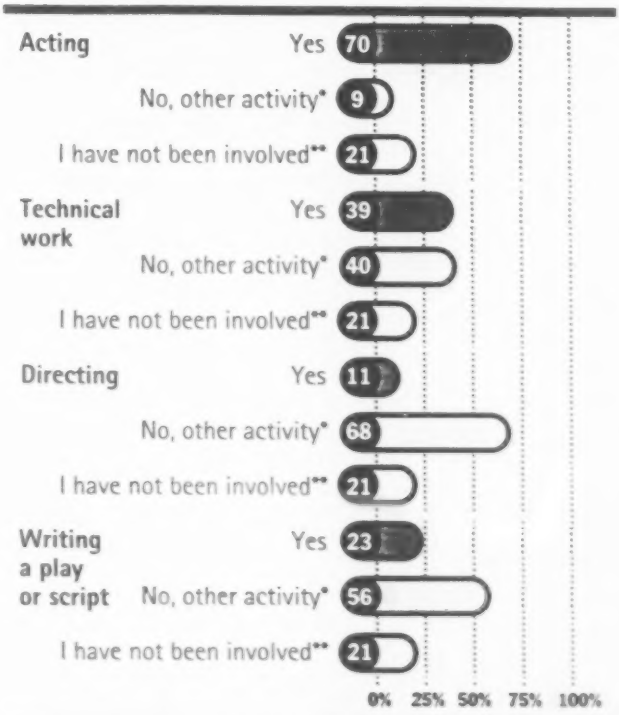
In this section, theatre Creating/Performing results are discussed in terms of total (or "aggregate") scores.[9] These scores represent averages based on student performances on each Creating/Performing task. The relationships of these average scores to opportunity-to-learn variables are presented in Tables 3.1 to 3.5. As shown in the tables, there is often a positive relationship between these opportunity-to-learn variables and student Creating/Performing results. Students reporting greater opportunities to participate in and learn about theatre exhibited higher average Creating/Performing scores than students reporting fewer opportunities.

Activities in Live Productions at School

Table 3.1 features results on student involvement in live productions at school. Results are presented for four specific theatre activities: acting, technical work, directing and writing a play or script. For each activity the table presents percentages and average Creating/Performing scores for three groups of students: (1) students

Table 3.1 **Students' Reports and Creating/Performing Scores by Various Tasks Done in Theatre Productions**

If you have been involved in live theatre productions in school, which of the following activities have you done?		% Students	Average Creating/ Performing Score (0–100%)
Acting	Yes	70	53
	No, other activity*	9	45
	I have not been involved**	21	43
Technical work	Yes	39	53
	No, other activity*	40	51
	I have not been involved**	21	43
Directing	Yes	11	53
	No, other activity*	68	52
	I have not been involved**	21	43
Writing a play or script	Yes	23	53
	No, other activity*	56	51
	I have not been involved**	21	43



NOTES: *The percentage and score in this row are representative of that portion of the sample that did not respond "Yes" to this activity, but did indicate involvement in one or more of the other activities in Table 3.1. For this series of background questions, respondents were to indicate only those statements that were applicable.

**The percentage and score in this row are representative of that portion of the sample that did not respond "Yes" to any of the activities in Table 3.1.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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9 Creating/Performing tasks are not summarized using a standard NAEP scale. A measurement requirement for scaling assessment results is that there be a sufficient number of students taking a given group of exercises and a sufficient number of exercises of a given type to be scaled. This was not the case for the Creating/Performing exercises. Although they consumed far more assessment time than written exercises, there were fewer exercises to group together into a scale. Moreover, given complex administrative procedures associated with these blocks (such as videotaping responses and having students work in groups), each student took only one Creating/Performing task.

who engaged in that activity, (2) students who did not engage in that activity but did engage in one of the other activities listed, and (3) students who did not engage in any of the listed activities. As shown in the table, 70 percent of students had done acting in live productions in school. Thirty-nine percent of students had done technical work and 23 percent had written a play or script in such productions. Relatively few students (11 percent) had directed.

Involvement in live productions had a positive relationship to average Creating/Performing scores. For each of the four activities, students who reported engaging in the activity had higher average Creating/Performing scores than did students who had not engaged in any of the activities. Furthermore, for all activities except acting, students who engaged in at least one of the other activities also had higher Creating/Performing scores than students who had not been involved.

Classroom Instruction in Theatre

Table 3.2 features results on classroom instruction students had received in theatre. Results are presented for five specific activities. For each activity, the table presents percentages and average Creating/Performing scores for three groups of students: (1) students who had instruction in that activity, (2) students who did not have instruction in that activity but did have instruction in one of the other activities listed, and (3) students who did not have instruction in any of the listed activities.

As presented in Table 3.2, 78 percent of students indicated that they had received classroom instruction in acting. Approximately 40 percent had received instruction in making a film or video and/or in technical theatre. Fewer students (20 percent) had received instruction in directing.

Classroom instruction in theatre had a positive relationship to Average Creating/Performing scores. For each of the five activities, students who reported instruction in the activity had higher average Creating/Performing scores than did students who had not received instruction in any of the activities. Furthermore, for all activities except acting, students who received instruction in at least one of the other activities also had higher Creating/Performing scores than students who had not.

Table 3.3 features the frequencies with which students were asked to engage in various theatre activities in school. Playing roles and reading a play or scene aloud were the most frequent activities. Thirty-six percent of students were asked to play roles at least once or twice a week, and 35 percent were asked to read a play or scene aloud at least once or twice a week. Twenty-nine percent of students were asked to improvise scenes at least once or twice a week, and 28 percent of students were asked to perform for an audience at least once or twice a week.

Relatively few students were asked to write a play or scene this often (11 percent), although 22 percent of students were asked to do so once or twice a month. This was also the case for doing technical theatre; 12 percent of students were asked to do technical theatre at least once or twice a week, and 20 percent were asked to do technical theatre once or twice a month.

Again, exposure to theatre learning had a generally positive relationship to student Creating/Performing scores. Students who were asked to play roles at least once or twice a week or once or twice a month outperformed students who never or hardly ever were asked to do so. Students who were asked to improvise scenes at least once or twice a week had significantly higher Creating/Performing scores than did students who were never or hardly ever asked to do so. Further, the students who were asked to perform for an audience at least once or twice a week or once or twice a month outperformed their peers who were never or hardly ever asked to do so.

Table 3.2 Students' Reports and Creating/Performing Scores by Classroom Instruction for Various Theatre Activities

Have you ever had classroom instruction in school in the following activities?		% Students	Average Creating/ Performing Score (0–100%)
Making a film or video	Yes	42	51
	No, other activity*	48	50
	None of the above**	10	38
Acting	Yes	78	52
	No, other activity*	12	40
	None of the above**	10	38
Directing	Yes	20	53
	No, other activity*	70	50
	None of the above**	10	38
Playwriting	Yes	34	53
	No, other activity*	55	49
	None of the above**	10	38
Technical theatre	Yes	39	52
	No, other activity*	51	49
	None of the above**	10	38

0% 25% 50% 75% 100%

NOTES: Percentages may not sum to 100 due to rounding.

*The percentage and score in this row are representative of that portion of the sample that did not respond "Yes" to this activity, but did indicate having instruction in one or more of the other activities in Table 3.2. For this series of background questions, respondents were to indicate only those statements that were applicable.

**The percentage and score in this row are representative of that portion of the sample that did not respond "Yes" to any of the activities in Table 3.2.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 3.3 **Students' Reports and Creating/Performing Scores by the Frequency with Which They Engage in Various Theatre Activities**

How often are you asked to do the following things in school?	% Students	Average Creating/ Performing Score (0-100%)
Play roles		
At Least Once or Twice a Week	36	54
Once or Twice a Month	22	51
Never or Hardly Ever	42	44
Read a play or scene aloud		
At Least Once or Twice a Week	35	52
Once or Twice a Month	28	51
Never or Hardly Ever	37	46
Improvise scenes		
At Least Once or Twice a Week	29	55
Once or Twice a Month	23	51
Never or Hardly Ever	49	46
Write a play or scene		
At Least Once or Twice a Week	11	50
Once or Twice a Month	22	53
Never or Hardly Ever	67	49
Do technical theatre		
At Least Once or Twice a Week	12	51
Once or Twice a Month	20	53
Never or Hardly Ever	68	48
Perform for an audience		
At Least Once or Twice a Week	28	53
Once or Twice a Month	32	53
Never or Hardly Ever	40	45

NOTE: Percentages may not sum to 100 due to rounding.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Student' abilities to track the development of their own work over time in portfolios is of interest to arts educators. According to Table 3.4, 51 percent of students saved their acting or drama work in a portfolio, or had their work saved by a teacher. While students whose work was saved in portfolios appeared to have higher Creating/ Performing scores than their peers whose work was not, those differences were not significant.

Table 3.4 **Students' Reports and Creating/Performing Scores by In-School Theatre Activities**

Did either you or your teacher save your acting or drama work in a portfolio or on tape or videotape?	% Students	Average Creating/ Performing Score (0-100%)
Yes	51	52
No	49	47

0% 20% 40% 60% 80% 100%

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Out-of-School Theatre Activities

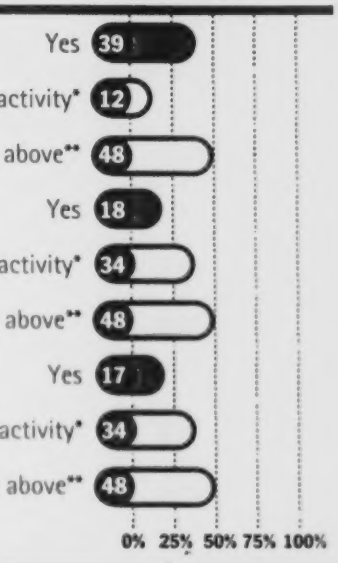
Table 3.5 features results for students who indicated whether they had or had not engaged in selected theatre activities outside of school.

Results are presented for three activities. For each activity the table presents percentages and average Creating/Performing scores for three groups of students: (1) students who engaged in that activity, (2) students who did not engage in that activity but did engage in one of the other activities listed, and, (3) students who did not engage in any of the listed activities.

As shown in the table, 39 percent of students indicated that they had gone to a play, musical, or puppet show, while 18 percent indicated that they had taken acting or drama classes, and 17 percent that they had written a play or script. For each of the three activities, with the exception of taking acting or drama classes, students who reported engaging in the activity had higher average Creating/Performing scores than did students who had not engaged in any of the activities. Furthermore, for all the activities, students who engaged in at least one of the other activities also had higher Creating/Performing scores than students who had not.

Table 3.5 **Students' Reports and Creating/Performing Scores by Out-of-School Theatre Activities**

When you are NOT in school, do you ever do the following things, NOT in connection with your schoolwork?		% Students	Average Creating/ Performing Score (0-100%)
Go to a play, musical, or puppet show	Yes	39	56
	No, other activity*	12	49
	None of the above**	48	45
Take acting or drama classes	Yes	18	51
	No, other activity*	34	56
	None of the above**	48	45
Write a play or script	Yes	17	57
	No, other activity*	34	53
	None of the above**	48	45



NOTES: Percentages may not sum to 100 due to rounding.

*The percentage and score in this row are representative of that portion of the sample that did not respond "Yes" to this activity, but did indicate doing one or more of the other activities in Table 3.5. For this series of background questions, respondents were to indicate only those statements that were applicable.

**The percentage and score in this row are representative of that portion of the sample that did not respond "Yes" to any of the activities in Table 3.5.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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Summary

Chapter 3 presented different kinds of information about students' knowledge and skills in theatre, in addition to examining students' theatre educational experiences in (and out of) the classroom. Several points of interest emerged from this discussion.

Patterns of Student Performance[10]

Patterns of students' knowledge and skills in Responding and Creating/Performing varied. Some kinds of tasks seemed more accessible to students, and others more difficult for both Responding and Creating/Performing.

Responding

- More students could describe feelings conveyed by actors in dramatic performances, or what actors did with their faces, voices, or bodies, than could explain how actors used their faces, voices, and bodies to convey character and feeling. For example, 41 percent of students could describe the voice used by an actor in the *Bug Pleasing* radio play, and some of those students could describe one way the actor's voice conveyed his character. Fourteen percent were able to describe two ways the actor's voice conveyed his character. While 44 percent of students could describe the feelings conveyed by an actress in the film *Jezebel*, 10 percent were able to explain one way in which the actress used her face or body to convey those feelings. (Two percent were able to explain more than one way in which the actress used her face and body to convey feeling.)
- More students could describe designs for costumes, sets, or other elements of staged productions than could link those elements to making an impression on an audience. For example, 34 percent of students were able to give clear and specific descriptions of a set piece they would design for a stage production of the *Bug Pleasing* radio play. Three percent were able to explain why one or more aspects of their designs would be suitable for an audience of children. Based on a script, 69 percent of students could list a few set elements for, or describe the mood of a scene from the Carson McCullers play *Member of the Wedding*. Nineteen percent were able to describe the mood correctly and list some set elements that would convey that mood.
- Students showed some knowledge of the technical elements of theatre. Sixty-five percent of students could offer reasonably accurate plans for how to create lighting effects for a scene in *Member of the Wedding*. Fifty percent were able to draw ground plans for a set of that scene that showed some understanding of a theatre space. (Seventeen percent of students were able to draw complete and essentially error-free ground plans.)
- Students also showed some ability to analyze the text of the play *1,000 Cranes* in order to create brief scripts of their own. When asked to write an alternative ending for a short play, 35 percent of students were able to create solid endings that showed understanding of how the playwright presented his characters. Three percent of students were able to create endings that showed understanding of the playwright's intentions and greater script-writing abilities: for example, the capacity to create and resolve tension.

Creating/Performing

Each Creating/Performing task in the theatre assessment was scored with a number of different scoring guides. Students' abilities varied in terms of what aspects of their knowledge and skills were being scored, and to some extent according to task.

- Many students demonstrated a solid level of spatial awareness. For example, 89 percent of students showed clear spatial awareness in the Camping task, and 82 percent in the Improv/Props task. These students for the most part avoided blocking their fellow actors and directed themselves toward an audience.

10 Some of the descriptions that follow refer to exercises and student responses found on the CD-ROM version of this report.

A smaller number of students were able to perform without ever blocking their partners or turning away from the audience; two percent of students were able to accomplish this in the Camping task.

- Students were also able to speak clearly and audibly in two of the tasks. Seventy-nine percent of students could be consistently heard and understood in Camping, and 93 percent in Improv/Props. However, 11 percent of students could be consistently heard and understood in Chocolate. It may have been challenging for students to both read an unfamiliar script and project their voices to an audience.
- Students' abilities to combine dialogue, action, and expression to communicate meaning to an audience varied across tasks. Sixty-seven percent of students demonstrated this ability most of the time in the Camping task, and two percent did all the time. In the Chocolate task, 30 percent of students demonstrated the ability to convey meaning (if only generally) most of the time, and six percent did all the time. Finally, 31 percent of students interpreted their lines in Improv/Props to convey meaning part of the time, while 12 percent succeeded in doing so all the time.
- Students' senses of ensemble varied with the task. The percentages of students who consistently listened and responded to one another were similar for the Camping and Chocolate tasks. In the Camping task, 23 percent of students were able to work consistently well together. Nineteen percent were able to do so for the Chocolate task. However, while one percent of students were able to listen and respond consistently for the Improv/Props task, 77 percent of students were able to listen and respond part of the time. This may have been due to the challenging nature of creating a story and connections among actors with the abstract script for Improv/Props.

Self-Evaluation Responses

Chapter 3 also briefly explored students' responses to self-evaluation questions about their own performances. Part of the reason for this brevity lies in the sparse quality of student responses to these questions, even at the higher score levels. Many factors could account for this sparseness. Some very important ones could have been the lack of opportunity to engage in their performances more than once, or to view their own performances before writing about them. More research would be needed to explore fully the relationship between students' abilities to Create and Perform, and their capacities to evaluate their work in writing.

Students' In-School Theatre Activities

To create a context for examining students' Responding and Creating/Performing knowledge and skills, students' reports of their in-school (and out-of-school) theatre activities were explored in Chapter 3. For both Responding and Creating/Performing, in-school activity was often positively associated with theatre achievement.

- Significantly larger percentages of students on the upper level of the Responding scale had acted in live theatre productions in school and had received classroom instruction in acting than the percentages of students in the middle and lower levels of the scale. Similarly, the percentages of students on the upper level of the scale involved with technical work in live theatre productions in school, and who had received classroom instruction in technical theatre were significantly higher than the percentages of students on the lower level of the scale. Finally, the percentages of students on the upper level of the scale who had received classroom instruction in making films or video was significantly larger than the percentage of students on the lower level of the scale.
- In Creating/Performing, students who indicated that they had done acting in live theatre productions in school outperformed their peers who indicated that they had not done so. Students who had received classroom instruction in playwriting and in acting outperformed their peers who had not. Similarly, students who were asked to play roles and perform for an audience in school outperformed those who never or hardly ever were asked to do so.

Chapter Four

visual arts

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Chapter Four

Creating and Responding in Visual Arts: A Close Look at the NAEP 1997 Visual Arts Assessment

The Content of the Visual Arts Assessment

The view that a complete arts education combines rigorous teaching about works of art and artists with having students create their own artworks is not a new one.[1] However, it is a view that has found fresh expression in recently published documents such as the *National Standards for Arts Education* and the NAEP *Arts Education Assessment Framework*. The standards and the framework both emphasize the idea that creating artwork is enriched by knowledge and understanding of art forms from a variety of historical and cultural contexts, and that this knowledge and understanding are in turn enriched by the act of creating.

The NAEP *Arts Education Assessment Framework* outlines an innovative assessment intended to reflect this view of good arts educational practices and the complex nature of art making. Students are to apply their knowledge of aesthetic properties and their expressive and technical skills to the analysis, interpretation, and creation of works of art and design.

Following the Framework closely, the NAEP Visual Arts Assessment is built around the processes of Creating and Responding. While Creating in the assessment, students show their abilities to communicate in works of art, think of different solutions to visual problems, generate ideas for works of art and design, and use their technical proficiency in realizing those ideas. While Responding, students analyze works of art and design (both two- and three-dimensional). In doing so, they demonstrate their knowledge of media and techniques, visual organization, the cultural contexts of artworks, how works of art convey meaning, and how user needs are met with well-designed functional objects. Responding exercises include both constructed-response (written) questions and multiple-choice questions.

Creating an arts performance assessment posed interesting challenges. In arts classrooms, there are many opportunities for discussion, planning, and revising. This is not the case in a timed assessment. So that students had as much of

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1 Stankiewicz, M.A. (1994). Foreword. In D. N. Perkins, *The intelligent eye: learning to think by looking at art*. Santa Monica, CA: The Getty Center for Education in the Arts.

an opportunity as possible to demonstrate their arts knowledge and skills, it was necessary to create context for the assessment exercises. This was done in three important ways. First, students were introduced to works of art or design and to Creating activities with explanatory texts and visual examples. Second, instructions for exercises were carefully crafted to guide students through a sequence of related tasks step by step, and to give students as much information as possible about what they were being asked to demonstrate. In these ways, the visual arts assessment attempted to avoid asking students to Respond to and to Create works of art and design in a conceptual vacuum.

At the same time, instructions were designed not to "overteach" students, and hence damage assessment results. Third, Creating and Responding exercises were built around a theme, concept, or work(s) of art, so that students could focus on just a few works or issues. This gave students the opportunity to think more deeply about the assessment tasks, and ensured that students were not asked isolated questions about unrelated works of art.

An overview of the grade 8 visual arts assessment "blocks" (a group of exercises administered as separate units to be completed in a set time frame) is presented on page 82 in Figure 4.1. As shown in the figure, the assessment consisted of seven blocks. Four of those blocks featured Responding and two-dimensional Creating exercises. These were multiple-choice and constructed-response questions asking students to analyze, describe, and identify different aspects of works of art, as well as tasks that asked students to draw and work with collage materials.[2] The four Responding blocks include stimulus works that represent a variety of cultures, genres, and historical periods.

The remaining three blocks consisted of three-dimensional Creating tasks asking students to work with plasticine (a clay-like substance) and other materials to create works of art.

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2 In spite of the fact that these blocks contained Creating tasks, for ease of reference, they will be referred to as Responding blocks in the text of this report.

Figure 4.1 The Content Description of the NAEP Visual Arts Assessment

Block Name		
"Self-Portrait" (Responding and 2-D Creating block)	Students are introduced to self-portraiture by observing two self-portraits. They analyze the self-portraits, applying their knowledge of aesthetic properties such as composition, style, and line. They also consider the relationships between these properties and the expressive qualities of each self-portrait. Then students create their own self-portrait drawings.	
"Mother/Child" (Responding block)	Students analyze five artworks on the theme of mother and child, representing a variety of cultures, forms, and historical periods. They apply their knowledge of aesthetic properties, using their technical and art historical knowledge, and their understanding of how artists convey meaning in their works.	
"Collage" (Responding and 2-D Creating block)	Students focus their observations on a collage by Romare Bearden. They respond to the images they see in the artwork and apply their perspectives to interpret the "story" depicted in the collage. Finally, students create collages around the memory of a childhood place.	
"Whisper Box" (Responding and 2-D and 3-D Creating block)	Students are introduced to the relationship between form and function in design by studying photographs of several packages. They apply their understanding of this relationship to analyze different kinds of packages. They then create two designs: one for a package to carry a fish on a bicycle, and one to hold a sound.	
"Metamorphosis" (3-D Creating block)	Students hear a short story about metamorphosis, and examine a drawing showing a transformation. They are then asked to render a metamorphosis of a man to a fish in plasticine.	
"Monument" (3-D Creating block)	Students are introduced to the concept of the monument. They are asked to sketch an idea for a monument based on the theme of International Children's Day, and then to realize that idea in chipboard and plasticine.	
"Kitchen Sculpture" (3-D Creating block)	Students are introduced to a contemporary sculpture that explores and transforms a common object. They are asked to sketch a series of ideas for a sculpture based on a kitchen implement, and then to realize those ideas in a sculpture using plasticine and wire.	

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Sample Responding and Creating Blocks and Exercises

In Parts 1 and 3 of this chapter, the different components of the visual arts assessment will be examined to provide more detailed information about what students know and can do when they are asked to create, analyze, and interpret works of art. Part 1 includes Figures 4.2 to 4.5, which feature the four visual arts Creating/Responding blocks. (Figures 4.2, 4.3, and 4.5 are found on the CD-ROM version of this report.) Part 3 includes Figures 4.9 and 4.10, which feature two of the visual arts Creating blocks. (Figures 4.9 and 4.10 are found on the CD-ROM version of this report.)

Each figure includes either the whole of a visual arts block, or selected exercises from a block. The figures demonstrate how Responding exercises were organized and presented to students, how Creating exercises were combined with Responding exercises, and how well students performed on both. Many sample student responses will be shown, to give a detailed picture of the range of student abilities. Percentages of students choosing the correct answer for multiple choice questions, or at the different levels in a constructed-response question scoring guide, are also featured. Parts 2 and 4 of this chapter examine overall summaries of Responding and Creating results, respectively, and their relationships to student-reported background variables.

Part One

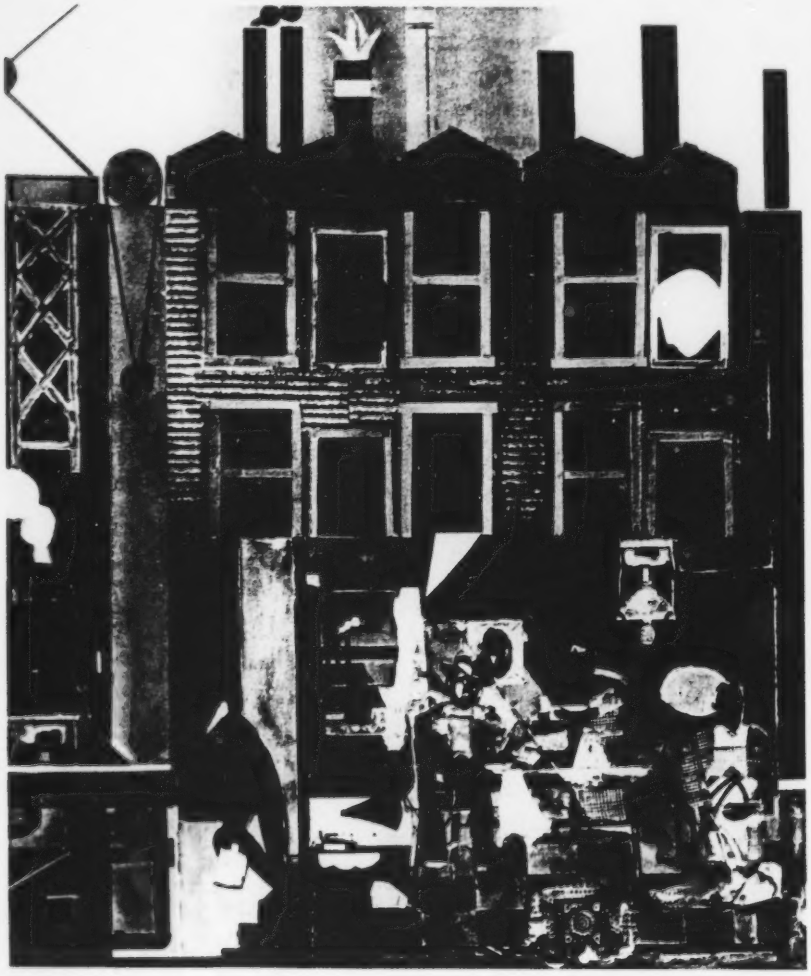
Sample Questions from the Visual Arts Creating and Responding Blocks

Figure 4.2 **Sample Questions and Student Responses from the "Self-Portrait" Block are found on the CD-ROM version of this report.**

Figure 4.3 **Sample Questions and Student Responses from the "Mother/Child" Block are found on the CD-ROM version of this report.**

Figure 4.4 Sample Questions and Student Responses from the "Collage" Block

In this block, students study a collage by Romare Bearden. Students have an 8" by 11" print of the work, and a poster hung up in the room to give them a distant, overall view. They respond to the images they see in the artwork, applying their perspectives to interpret the "story" depicted in the collage and to examine relationships between technical and expressive aspects of the work. Finally, students make collages created around the memory of a childhood place.

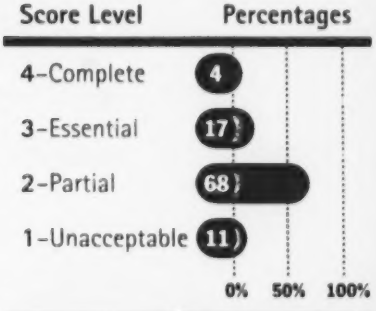


Pittsburgh Memories: Romare Bearden, Courtesy of Carnegie Museum of Art.

Sample Question 1
(Item 2 in Block)

After answering a question asking them to write down three of their first impressions of the Bearden collage, students were asked to deepen their observations of the artwork. They glued a postcard of the collage into their test booklets and were asked to draw arrows to aspects of the artwork the artist may have wanted people to notice. They then wrote descriptions of those aspects. Responses to this extended constructed-response item were scored with a four-level scoring guide that allowed for two levels of partial credit. The sample student responses that follow represent a Partial score, an Essential score, and the highest score, Complete.

Percentage of Eighth Graders Receiving Various Scores

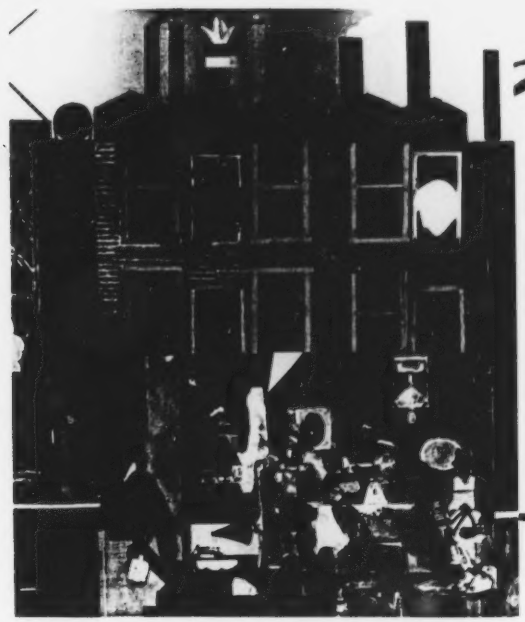


NOTE: Of the 11 percent of student responses in the lowest score level, 2 percent consists of omits and otherwise unscorable responses.

Sample Student Response Receiving a Score of Partial

Take out a postcard, glue-stick, and black felt-tip pen from your packet. Now paste your postcard in the space below. Look closely at the image. What features do you think Bearden wants you to notice in this work? Use your black felt-tip pen to draw arrows from the margin to at least three features you think Bearden wants you to notice. Label the features you have identified with brief but thoughtful descriptions, as shown in the example below.

Partial. This student, typically for partial responses, offers a few general observations about the collage that show a perception of some important parts of the work.



They are communicating through windows

– Write a thoughtful and specific description of what you think Bearden wants you to notice next to each arrow

This is a family that are eating and relating.

Pittsburgh Memories: Romare Bearden, Courtesy of Carnegie Museum of Art.

The man is a workingman that is tired

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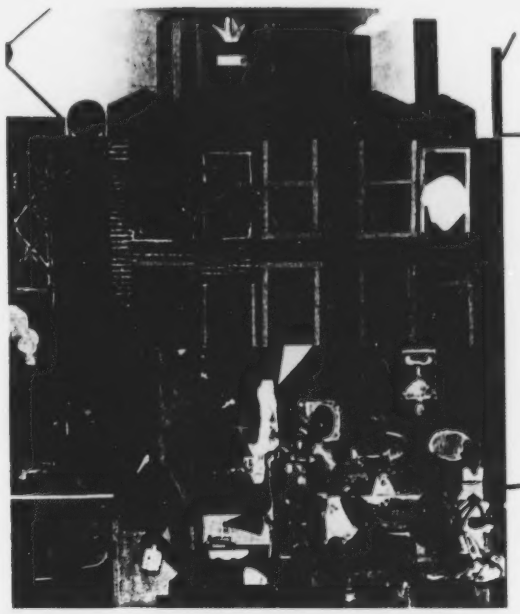
Sample Student Response Receiving a Score of Essential

Take out a postcard, glue-stick, and black felt-tip pen from your packet. Now paste your postcard in the space below. Look closely at the image. What features do you think Bearden wants you to notice in this work? Use your black felt-tip pen to draw arrows from the margin to at least three features you think Bearden wants you to notice. Label the features you have identified with brief but thoughtful descriptions, as shown in the example below.

Essential. This student focuses on the same features as the student in the previous example. However, the response demonstrates a higher level of observation. This student comments on the brighter colors in the interior that contrast with the rest of the work and capture the attention of the viewer.



Bearden wants you to notice these faces in the windows.

Write a thoughtful and specific description of what you think Bearden wants you to notice next to each arrow.

Bearden wants you to notice the people in this room because they are brighter colors than the rest.

Pittsburgh Memories: Romare Bearden, Courtesy of Carnegie Museum of Art.

Bearden wants you to notice this man that looks kind of sad walking down the steps.

Percentage of Eighth Graders Receiving Various Scores

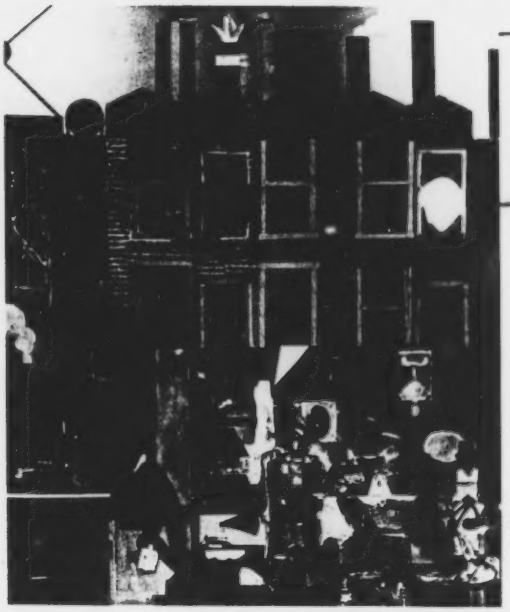
Score Level	Percentages
4-Complete	4
3-Essential	17
2-Partial	68
1-Unacceptable	11

0% 50% 100%

NOTE: Of the 11 percent of student responses in the lowest score level, 2 percent consists of omits and otherwise unscorable responses.

Sample Student Response Receiving a Score of Complete

Take out a postcard, glue-stick, and black felt-tip pen from your packet. Now paste your postcard in the space below. Look closely at the image. What features do you think Bearden wants you to notice in this work? Use your black felt-tip pen to draw arrows from the margin to at least three features you think Bearden wants you to notice. Label the features you have identified with brief but thoughtful descriptions, as shown in the example below.



I think he wants us to notice the flame and red pipe because they are a burst of color amongst the black ones.

Write a thoughtful and specific description of what you think Bearden wants you to notice next to each arrow

I think that because this family & their home is so colorful, that it draws your attention

Pittsburgh Memories: Romare Bearden, Courtesy of Carnegie Museum of Art.

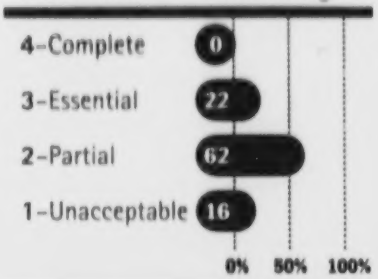
I think that we are to notice this man because when you see him, it makes you think: What's he doing? What's he carrying? And you search the painting for an answer.

Complete. This student also focuses on the man and family. Like the student who received the Essential score, he or she explains why each feature is noticeable. Each observation suggests that the student is beginning to pay attention to how parts of the work lead the viewer's eye to other parts. This is especially true for the observation about the man and how his pose and placement create curiosity in the viewer. Few students were able to offer three observations this astute.

Sample Question 2 (Item 3 in Block)

Once students had been given the opportunity to think about specific parts of the collage, they were asked to step back and consider the work as a whole. In this question, students were asked to tell the "story" of the collage, seeing it as a visual narrative. Responses to this question were challenging to score because the range of interpretations was wide, and students tended to offer general responses.

Percentage of Eighth Graders Receiving Various Scores



NOTE: Of the 16 percent of student responses in the lowest score level, 2 percent consists of omits and otherwise unscorable responses.

Sample Student Response Receiving a Score of Partial

Some art critics call this work a "visual narrative." A "narrative" is an orderly account of events or a story.

Look again at the work. What do you think is the story Bearden tells in his memory of Pittsburgh? Put into words what you think the story is about. Talk about specific things you see in the work that help you see the story.

I think the story is about the industrial times in Pittsburg, where people would work long hours for little pay and have to support a family and a house on the little money they had.

Partial. Students at the Partial level often gave general interpretations of the collage that made few if any specific references to the work to defend their opinions.

Sample Student Response Receiving a Score of Essential

Some art critics call this work a "visual narrative." A "narrative" is an orderly account of events or a story.

Look again at the work. What do you think is the story Bearden tells in his memory of Pittsburgh? Put into words what you think the story is about. Talk about specific things you see in the work that help you see the story.

The life in Pittsburgh is rough. The air is polluted because of power plants. Blacks and whites don't never get along. People go to work every day to make a little money. Family's still spend time together every though it is a struggle to live in Pittsburgh.

Essential. This student attempts to support his or her interpretations of the collage with observations about the work. However, it is not clear how the student deduces conflicts between Blacks and Whites.

Sample Student Response Receiving a Score of Complete

Some art critics call this work a "visual narrative." A "narrative" is an orderly account of events or a story.

Look again at the work. What do you think is the story Bearden tells in his memory of Pittsburgh? Put into words what you think the story is about. Talk about specific things you see in the work that help you see the story.

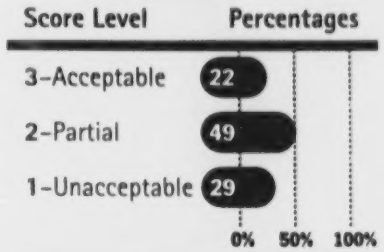
It is a story of people. Ordinary people living in a poor district, because of the train and factories. Who brighten their lives with a little color in contrast to the bland scene. Also of misery and shame by the stoop of the man's shoulders.

Complete. This student clearly ties each interpretation of the collage to an aspect of the work.

Sample Question 3 (Item 4 in Block)

In item 4 students were asked to examine and articulate the relationship between the whole work and an important part of the work. Responses to this short constructed-response question were scored with a three-level scoring guide that allowed for partial credit. The sample student responses that follow represent a Partial score, and two samples of the highest score, Acceptable. Two samples are represented because of the information each offers about how students perceived the Bearden work at this point in the block.

Percentage of Eighth Graders Receiving Various Scores



NOTE: Of the 29 percent of student responses in the lowest score level, 6 percent consists of omits and otherwise unscorable responses.

Sample Student Response Receiving a Score of Partial

Identify something in the work that is unusual or unexpected. What is it and how does it contribute to the work as a whole? Be thoughtful and specific.

A train headed towards the building

Partial. Many students at this level were able to identify and describe an unusual part of the collage, but could not articulate its contribution to the overall meaning of the work. This student notes the placement of the train in the collage.

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Sample Student Response Receiving a Score of Acceptable

Identify something in the work that is unusual or unexpected. What is it and how does it contribute to the work as a whole? Be thoughtful and specific.

The big train is unusual because right next to it is an apartment building and it looks like it's going to run right into it. But the train adds more movement.

Acceptable. The first student receiving this score notes the juxtaposition of the train and the building. He or she also perceptively observes that the train adds movement to the work, which shows the student is responding to the overall experience of the work.

Sample Student Response Receiving a Score of Acceptable

Identify something in the work that is unusual or unexpected. What is it and how does it contribute to the work as a whole? Be thoughtful and specific.

The bright mixed colors is only one area of the picture. It shows that he is happy when he goes home. It shows his emotions change as he goes from place to place.

Acceptable. Many students noted the bright colors of the interior of the building. Some speculated about the happiness that the colors might suggest. This student is especially observant because he or she registers the figure leaving the house as a means of connecting the interior and exterior parts of the work. The student also grasps that the collage may be trying to represent different moments in time, appropriate for a memory.

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Sample Question 4 (Item 6 in Block)

After students had been given time to study the collage and think about relationships between parts of the work and the whole work, they were asked to focus their attention on certain technical aspects of the composition. This multiple-choice question measures students' abilities to recognize a significant technical dimension of the collage. The question was scored either correct or incorrect. The correct answer is B.

Which of the following is emphasized in the work?

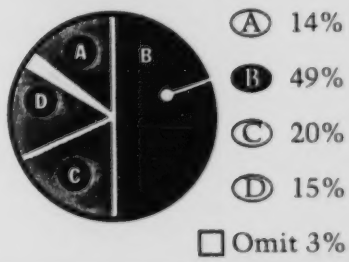
(A) The use of shading to make the subject look realistic.

(B) A grid-like arrangement using horizontal and vertical rectangles

(C) A composition that uses traditional approaches to perspective

(D) The use of a single color scheme with varying values

Percentage of Eighth Graders Answering Correctly: 49%



NOTES: Percentages do not sum to 100 due to rounding.

The omit percentage reported includes student refusals, blank or multiple responses, and illegible or otherwise unscorable responses.

Sample Question 4 (Item 7 in Block)

This multiple-choice question measures students' abilities to place the collage in stylistic context. The question was scored either correct or incorrect. The correct answer is D.

Which of the following most clearly identifies the style of this work?

- (A) Impressionism
- (B) Photographic realism
- (C) Surrealism
- (D) Semiabstract representation

Percentage of Eighth Graders Answering Correctly: 29%

(A) 34%
(B) 22%
(C) 12%
(D) 29%
Omit 4%

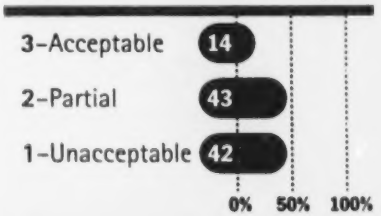
NOTES: Percentages do not sum to 100 due to rounding.

The omit percentage reported includes student refusals, blank or multiple responses, and illegible or otherwise unscorable responses.

Sample Question 5 (Item 8 in Block)

This short constructed-response question asks students to explore relationships between interior and exterior areas of the collage. The question is in part intended to prepare students for the Creating task in which they are asked to make collages that portray both the inside and the outside of a remembered place. Responses to the question were scored with a three-level scoring guide that allowed for partial credit. The sample student responses that follow for the first part of question eight represent responses that received a Partial score, and the highest score, Acceptable.

Percentage of Eighth Graders Receiving Various Scores



NOTES: Percentages do not sum to 100 due to rounding.

Of the 42 percent of student responses in the lowest score level, 8 percent consists of omits and otherwise unscorable responses.

Sample Student Response Receiving a Score of Partial

Look again at the Bearden work. How does Bearden show us the contrast between the interior and the exterior areas of the building? Be specific.

He shows on the upper part of the picture the outer side of the building and what the people are doing. To show the inner part of the building he goes to the bottom of the picture and shows what the people are doing inside.

Partial. As with most Partial responses, this one describes in a general way how Bearden shows the inner and outer areas of the building, but does not explain how he creates contrast between the two areas.

Sample Student Response Receiving a Score of Acceptable

Look again at the Bearden work. How does Bearden show us the contrast between the interior and the exterior areas of the building? Be specific.

For the outside he uses grays and he textur.ees it differently. On the other hand the insid has grays, but also has lots of bright colors and movement Like all the people being busy and cleaning or doing whatever.

Acceptable. This student observantly refers to color and movement to explain how Bearden creates contrast between the two areas.

Sample Question 6 (Item 9 in Block)

Once students had been given the opportunity to observe and analyze the Bearden collage, they were asked to do some creative work of their own, according to the instructions shown below. The instructions clearly illustrate the attempt made to engage and guide students through the task.

Sample Question 6 (Item 9 in Block)

Take time to look again at your print of Pittsburgh Memories. The collage you see visually expresses a memory of Bearden's own past, as well as his deep appreciation for aspects of everyday life. (A collage is a work of art in which different pieces of different kinds of materials are assembled and fastened onto a flat surface.)

Study the Bearden work, and think about how the collage shows the artist's memory of what life in Pittsburgh was like. Notice how Bearden combines and organizes objects and places in unusual and unexpected ways to express what it is like to remember. Look for the ways in which interesting contrasts between inside and outside areas and the use of details and colors communicate a memory.

Now think of a memory of a place where you once lived, where you live now, a friend's house, or another place important to you in your community. What kinds of pictures do you see in your mind when you remember what it was like to be there?

Being as creative as you can, create a memory collage of the place you choose. In your collage, communicate what you remember about what it was like both inside of this place and outside in the neighborhood.

To make your collage:

- Take out all of the materials from your packet. You may use your scissors and/or tear materials you choose for your collage.
- Assemble on your sheet of white drawing paper pieces of any of the materials provided to show both the inside of the place you choose and what it was like outside.
- Once you have pasted down these areas, you can add details with markers and oil pastels. .

After you have completed your memory collage, you will answer a question about your collage. You will have 43 minutes to do your collage and to answer the question.

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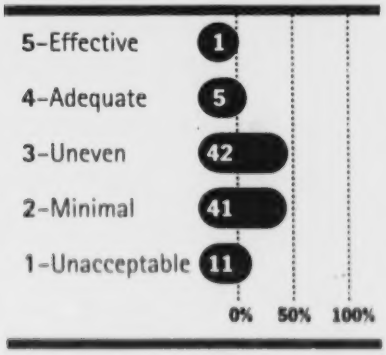
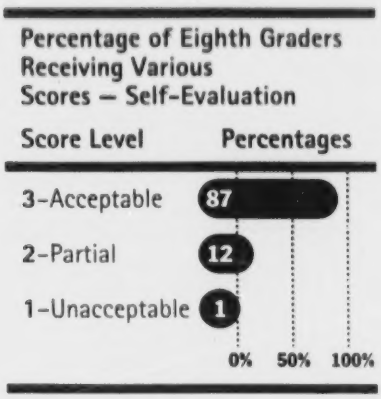
Percentage of Eighth Graders Receiving Various Scores — Collage



Students' works were scored with a five-level scoring guide that allowed for three levels of partial credit. The scoring guide was intended to capture how well students used their technical abilities to communicate a sense of a remembered place in a collage. The sample student collages represent the lowest score, Unacceptable, partial scores called Minimal, Uneven, and Adequate, and the highest score, Effective.

Percentage of Eighth Graders Receiving Various Scores — Self-Evaluation



Each collage is shown with its accompanying student self-evaluation, the response to item 10. As explained above, after most Creating tasks, students were asked to evaluate their own work. Responses to item 10 were scored with a three-level scoring guide that allowed for partial credit. The student responses that appear with the collages that follow represent the range of scores: the lowest score, Unacceptable, Partial scores, and the highest score, Acceptable. Good Creating work did not always correspond to good self-evaluation work, and vice-versa, as the self-evaluation responses shown demonstrate.

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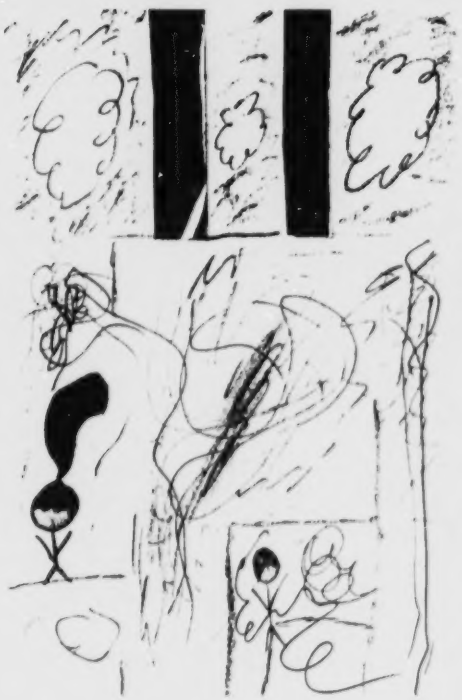
Student 1: Sample Collage Receiving a Score of Unacceptable



Unacceptable for Collage. Many collages at this level showed either no use of collage techniques, or, as in this work, very limited use. This student has used collage to show smokestacks on a building, but the rest of the work is drawn. The work is colorful and does succeed in conveying a building covered with graffiti, but it does not do so with collage techniques.

Student 1: Sample Self-Evaluation Response Receiving a Score of Partial

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

I described my place with grephetee on building's which is about the only thing I remember when I lived their.

Partial for Self-Evaluation: Students who received a Partial score for their written comments about their own collages tended to make fairly general observations about their work. As was observed during the discussion of the Self-Portrait task, this may indicate that self-evaluation of their own artwork is challenging for students when they have not had the opportunity to create more than one work over a period of time. Additionally, students may lack experience with evaluating their own work.

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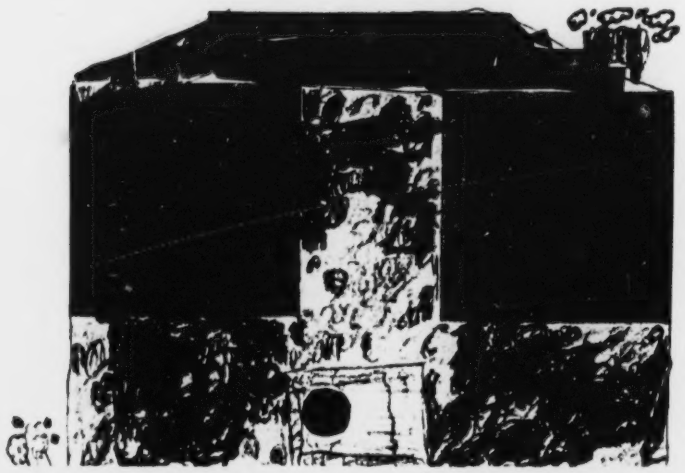
Student 2: Sample Collage Receiving a Score of Minimal



Minimal for Collage. At this level, the ability to use collage to express a memory of a place was barely evidenced. This student seems to be trying to represent a house, and it is possible that both inside and outside areas are shown. Collage is used to show what are probably windows, a roof, and what could be a door, although the circular shape near the bottom of the work is ambiguous. Overall, the work lacks a scheme of place and relies on basic forms without detail.

Student 2: Sample Self-Evaluation Response Receiving a Score of Unacceptable

Look carefully at your collage.

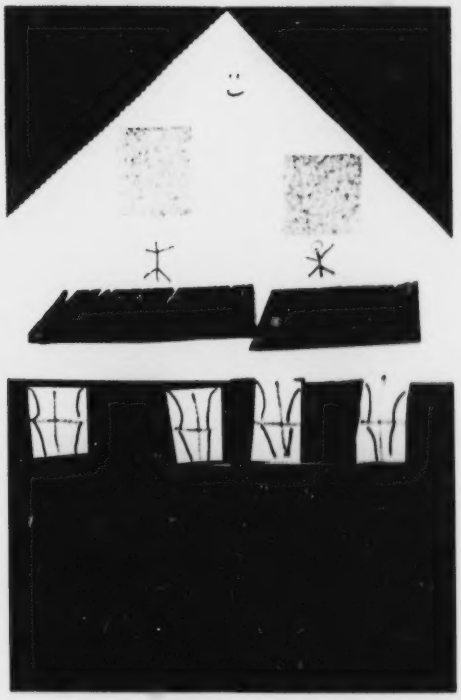
Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

The ways to show a memory of a place is to think a know.

Unacceptable for Self-Evaluation. This lower-level response, in common with many others, repeats the prompt instead of addressing the question. Most students were able to write at least brief comment about the content of their collages.

visual arts

Student 3: Sample Collage Receiving a Score of Uneven



Uneven for Collage. Students at the Uneven level exhibited the ability to use collage techniques in parts of their works. Their choice and use of materials showed occasional awareness of pattern, texture, color, contrasts, and the relationships of these qualities to depicted objects. Parts of their works sometimes lacked variation or experimentation with materials. Collages at this level also sometimes showed a lack of compositional unity and an uneven ability to capture a mood or feeling about a remembered place.

This first Uneven collage uses materials in interesting ways here and there. The textured cardboard seems to show a roof, while the marbled paper in the bottom half of the work may be the outside of a house upon which an interior scene is drawn with craypas. Although the work demonstrates some awareness of composition, it is hard to tell what is outside and what is inside.

Student 3: Sample Self-Evaluation Response Receiving a Score

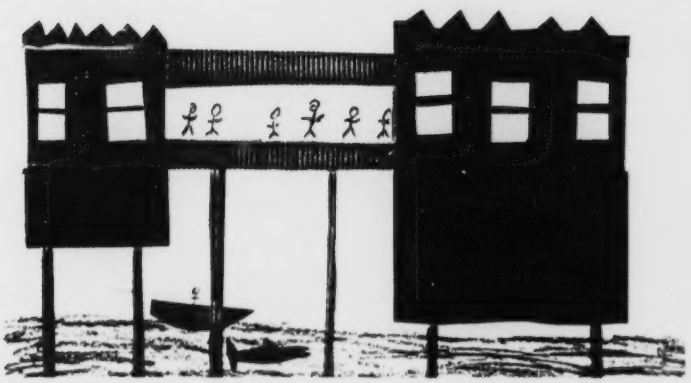
Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

The artwork is about a city home were kids are playing outside injaying the weather playing in the field. inside at nite where everyone geting ready to eat dinner.

Acceptable for Self-Evaluation. This student gives a reasonable amount of specific information about his or her collage. While this is not a very strong sample of this level of response, it helps a viewer to make sense of the collage. Interestingly, the written response in this case also confirms the score of the collage by demonstrating the gap between this student's ideas and his or her ability to realize those ideas. It is hard to see that the open triangle in the upper part of the work is a field outside, and that there is a meal taking place in the lower half of the work.

Student 4: Sample Collage Receiving a Score of Uneven



Uneven for Collage. This collage also received a score of Uneven. The choice of the textured cardboard to show the wood of a dock is effective, as is the blue craypa to show water. But most parts of the collage are depicted in a rigid way and rely exclusively on basic forms.

Student 4: Sample Self-Evaluation Response Receiving a Score of Acceptable

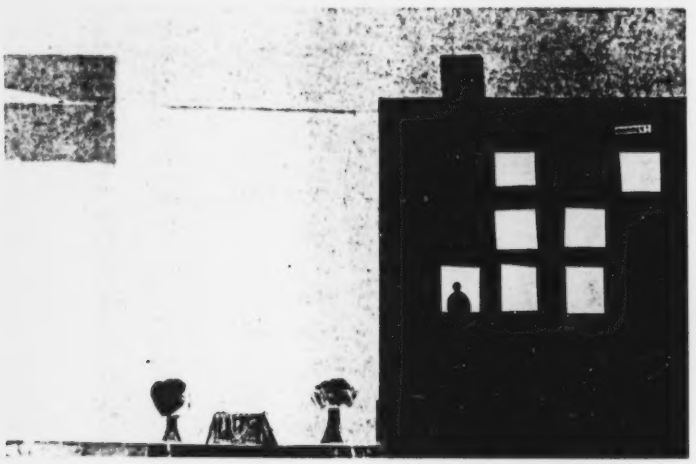
Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

being right on the water
+ going Fishing And The
liTTle walkway So your
can see The waTer

Acceptable for Self-Evaluation. This student gives a reasonable amount of specific information about his or her collage. While this is not a very strong sample of this level of response, it helps us to make sense of the collage, in particular the stick figures floating in white space on what is meant to be a walkway. Responses at this level usually helped to clarify student work; most, however, did not supply information about how materials were actually used to accomplish different effects.

Student 5: Sample Collage Receiving a Score of Uneven



Uneven for Collage. This final sample of an Uneven collage is quite well done in parts. The use of tissue paper to show a blue sky and floating grayish clouds demonstrates a good awareness of how to utilize transparency and texture, and the tissue paper contrasts well with the heavy red construction paper used to show the apartment building. The yellow and black construction paper showing lit and dark windows is effective. All of these choices show the student's capacity to evoke a mood or feeling of a remembered place. However, while the work is strong in some ways, it does not show an interior space, but rather suggests one with the figure in the window. Hence it received an Uneven score.

Student 5: Sample Self-Evaluation Response Receiving a Score of Partial

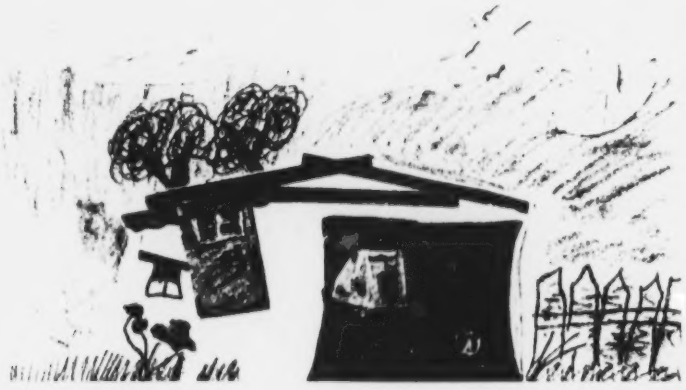
Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

I chose the apartment building I used to live in.

Partial for Self-Evaluation: This student merely identifies the subject of his or her collage, and so received a Partial score.

Student 6: Sample Collage Receiving a Score of Adequate



Adequate for Collage. The three student works chosen to show the Adequate level each demonstrate the ability to use collage technique throughout most of the work. Each shows both the inside and outside of a remembered place, although the two areas in each work may not be well integrated or equally well done. Forms and objects in each work are generally clear and have distinguishable features, and most objects are shown in relation to one another and to the whole page. Each collage is also reasonably expressive.

The first Adequate work shows a deliberate use of technique and color to depict certain objects and to convey the feeling of a remembered place. Red construction paper contrasts with the yellow half of the house to represent the inside area. The inside is identifiable by the contrasting paper and by the bed with a teddy bear on it drawn in craypas. While both the exterior and interior could have been more effectively integrated, overall, this student has addressed several components of the problem.

Student 6: Sample Self-Evaluation Response Receiving a Score of Acceptable

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

I showed my old house. Because of the white paper used to create on I used yellow construction paper colored white as my house. I chose to represent my room in the old house. The cardboard & tissue created the 3-D effect of curtains, doors, clouds, flowers, and a small porch. blending was used to hopefully give a semi-surreal effect.

120

Acceptable for Self-Evaluation. This student gives a very strong evaluation of his or her work. The student articulately uses art vocabulary and explains how he or she used materials to create different effects. Particularly notable is the reference to blending the craypas to create a surreal effect, which suggests that the student was aiming to capture the quality of a memory. This is an exceptional response that suggests some experience in evaluating his or her own work.

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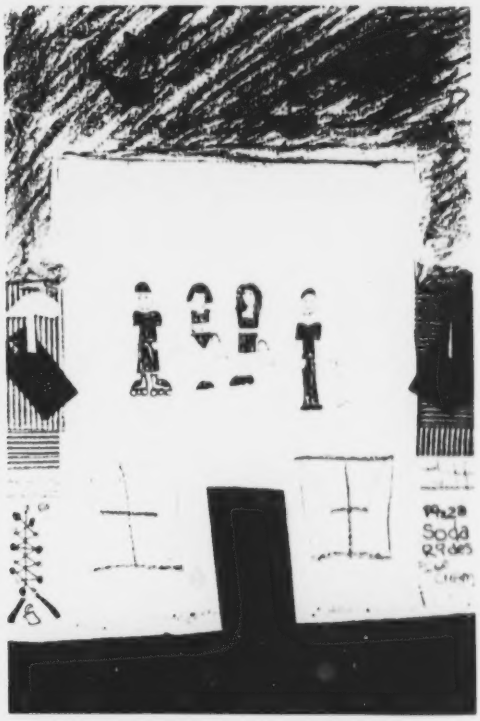
Student 7: Sample Collage Receiving a Score of Adequate



Adequate for Collage. This second Adequate collage effectively uses color, literal representation, (particularly in the rendering of the figures), contrasts, and pattern, and appears to have an organized composition. Collage is used to show a central structure and detail, such as umbrellas and towels. However, the interior space is somewhat ambiguous.

Student 7: Sample Self-Evaluation Response Receiving a Score of Unacceptable

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

I didn't finish my collage

Unacceptable for Self-Evaluation. Some students, such as this one, may have run out of time.

Student 8: Sample Collage Receiving a Score of Adequate

Adequate for Collage. The last Adequate collage uses collage technique effectively to depict the inside and outside of a house in a yard. The deliberate choice of the glossy green paper for the treetop and grass help to evoke a mood or feeling. The student has also adeptly used variation in size of windows and spaces (as does Bearden) to show what may be a porch area of the house that is further back. The student did not get the highest score because the area and objects depicted on the right float ambiguously in space.

Student 8: Sample Self-Evaluation Response Receiving a Score of Acceptable

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

Outside, a brick house with a big tree in the front yard with a basketball goal in the driveway Inside, there is a cozy couch with an oriental rug.

Acceptable for Self-Evaluation. This student gives a solid evaluation of his or her work. The student explains fairly specifically what he or she intended to show. The evaluation does help in understanding the work.

Student 9: Sample Collage Receiving a Score of Effective

Effective for Collage. The two student collages chosen to show the Effective level both demonstrate the ability to use collage technique throughout the whole work. Each collage clearly shows both the inside and outside of a remembered place. The inside and outside areas are skillfully done and are well integrated in each work. Materials are used in both collages in deliberate ways to represent ideas, forms and objects. Finally, objects in both works are effectively combined and organized in unexpected ways that appear to express the quality of a memory. Very few students (1 percent) were able to successfully address this many components of the problem.

The first Effective work shows an excellent sense of pattern, texture, color, transparency, and contrast. Mounds of snow in a snowstorm are effectively rendered with overlapping, repeated shapes of blue and gray tissue paper. A capacity to evoke the mood or feeling of a remembered place is evident in the rhythmic pattern of dark trees varying in size and at angles to one another, and in the pattern of dark clouds that frame the scene. An interior space is clearly shown by a large shape of more tissue paper, suggesting a hollow in the snow or, as the student explains, a cave. The two abstract figures, the windows, and the fire done with construction paper all add detail and clarity to the interior area, and separate it from the woods outside.

Student 9: Sample Self-Evaluation Response Receiving a Score of Acceptable

Look carefully at your collage.

Describe in detail the ways that you show a memory of the place you chose and explain what your collage is about. Use evidence from your work to support your answer.

In my collage, I put it as a snowstorm. There are bright green trees on the snow, & there are black & white storm clouds. I also put a cave. In the cave I have 2 people by a fire, & behind them, are 2 windows.

Acceptable for Self-Evaluation. This student gives a thorough description of his or her work.

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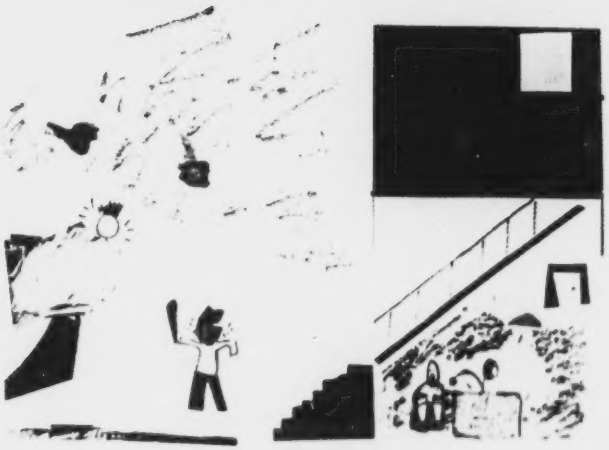
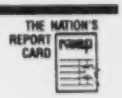
Student 10: Sample Collage Receiving a Score of Effective



Effective for Collage. This second Effective work is very different, but equally skilled. The student seems to have explored some of Bearden's methods. A stairway, figure, and a textured cardboard roof separate inside and outside areas and the inside is shown by cutting away the walls of the house. Objects, lines, and shapes are carefully and deliberately placed to tell a story. Collage materials and drawing tools are used to create lines of varied thickness and texture that unify the parts of the work and express a strong feeling. The figures, gestures, and facial details (rarely seen in responses to this task) are meaningful parts of the overall expression of the collage.

Blank for Self-Evaluation. Either this student ran out of time because of the effort put into the collage, or simply skipped the last question in the block. Twenty-one percent of students left this question blank, suggesting the challenge in planning assessment time for a creative, hands-on activity.

Figure 4.5 **Sample Questions and Student Responses from the "Whisper Box" Block are found on the CD-ROM version of this report.**



visual arts

Part Two

The Visual Arts Responding Item Map and Student Profile

Reporting the Visual Arts Assessment Results

In this section, overall summaries of Responding results in terms of student-reported background variables and the Responding scale are featured.

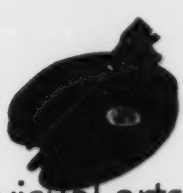
The overall summaries deal with Responding and Creating results separately. While the knowledge and skills students draw upon to Create and Respond in visual arts do overlap and inform one another, it is plausible that some students will Create but not Respond well, and vice versa. To do justice to differing abilities among students, results for Creating and Responding exercises are summarized separately.[3]

The Visual Arts Responding Scale

The visual arts assessment measured students' Responding abilities with both short and extended constructed-response questions and multiple-choice questions. Item Response Theory (IRT) methods were used to produce a scale that summarizes the results from these questions. The scale ranges from 0 to 300. Item Response Theory (IRT) is a set of statistical models useful in summarizing student performance across a collection of test exercises requiring similar knowledge and skills. In the context of the visual arts assessment, IRT methods were used to create a summarizing scale that relates the probability of students doing well or badly on the visual arts assessment exercises to their general Responding abilities (abilities to analyze, describe, and interpret works of art).

To give meaning to the levels of the Responding scale, it is useful to illustrate the kinds of questions that students at particular scale score levels of performance can answer correctly. Figure 4.6 presents this illustration, called an "item map," for the Responding scale. An item map is a visual representation that compares questions with scale scores and indicates which kinds of questions students can likely-answer correctly at each level on the scale. Constructed-response questions are shown in regular type and multiple-choice questions are shown on the item map in italics. The position of a constructed-response question on the item map represents the scale score attained by students who had at least a 65 percent probability of reaching a given score level on that question. The position of a multiple-choice question on the item map represents the scale score attained by students who had at least a 74 percent probability of correctly answering that question.

An example of how to interpret the item map may be helpful. In Figure 4.6, a 4-option multiple-choice question about the stylistic emphasis in a Romare Bearden collage maps at the 189 point on the scale. This means that students with visual arts scale scores at or above 189 were likely to answer this question correctly – that is, they had at least a 74 percent chance of doing so. Put slightly differently, this question was answered correctly by at least 74 of every 100 students scoring at or above 189 on the scale. This does not mean that students at or above the 189 scale score always would have answered this question correctly, or that student below the 189 scale score always would have answered it incorrectly. Rather, the percentage of students who can successfully answer the question depends on their overall ability as measured on the visual arts Responding scale.



3 Furthermore, a measurement requirement for summarizing student responses to different exercises together is that those exercises measure the same or similar knowledge and skills. The range of visual arts knowledge and skills is very wide. Knowledge and skills are also related in subtle and various ways in their applications to Creating and Responding. These factors diminish the possibility that the processes, in strict measurement terms, utilize knowledge and skills in ways similar enough to be summarized on a single scale.

Figure 4.6

Map of Selected Questions on the NAEP Visual Arts Responding Scale: Grade 8

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300

Upper Level

(294) Support plausible interpretation of Kendall mother/child portrait with observations about pose, background, contrast, and color.

(281) Label and specifically describe three or more features of Bearden collage that the artist wants you to notice.

(273) *Identify a technical similarity between Schiele and Kollwitz self-portraits.*

(237) Support plausible interpretation of Schiele self-portrait with observations about style, line, and color.

(234) Describe three ways one mother/child portrait is less realistic than another.

(232) Explain materials and design of own package idea for transporting fish on bicycle.

(222) Describe three aspects of own self-portrait that communicate something about you.

(218) Explain how own package for transporting fish on bicycle attaches to bike.

(209) Explain how artist used light and shadow to create realism in mother/child portrait.

(209) Explain how Bearden creates contrast between interior and exterior areas in collage.

(203) *Identify genre of Bearden collage.*

(202) Analyze and describe narrative conveyed by Bearden collage.

(201) *Identify an example of 20th century Western art.*

(199) *Identify an example of Renaissance art.*

(195) Explain three ways an artist made some things look near and some far in mother/child portrait.

(189) Support plausible interpretation of Schiele self-portrait with observations about style, line, or color.

(189) *Identify a stylistic emphasis in Bearden collage.*

(181) Describe two characteristics of charcoal in Kollwitz self-portrait.

(179) Describe two aspects of own self-portrait that communicate something about you.

75th Percentile 173

Middle Level

(173) *Identify purpose of insulating packaging material.*

(169) *Infer from photograph advantages of shrink-wrap packaging.*

(162) Describe one aspect of own self-portrait that communicates something about you.

(157) Identify a difference between interior and exterior areas in collage.

(152) Give general idea of how own package idea for transporting fish on bicycle attaches to bike.

(145) Analyze subject of five mother/child portraits of different genres.

(144) Describe interesting aspects of three of four elements (colors, lines, shapes, and composition) in a mother/child portrait.

(141) Describe one characteristic of charcoal in Kollwitz self-portrait.

(140) Describe one or two ways one mother/child portrait is less realistic than another.

(138) Describe three specific and accurate first impressions of Bearden collage.

25th Percentile 129

Lower Level

(129) Explain one or two ways an artist made some things look near and some far in mother/child portrait.

(120) Describe aspect(s) of Bearden collage.

(107) Describe what Schiele self-portrait is communicating or describe an aspect of style, line, or color.

(104) Describe aspect(s) of Kendall mother/child portrait.

(102) Infer from photograph one advantage of mailing a poster in a mailing tube.

(50) Describe interesting aspects of one or two of four elements (colors, lines, shapes, and composition) in mother/child portrait.

0

NOTE: Italic type indicates a multiple-choice question. Regular type indicates a constructed-response question.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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As another example, consider the constructed-response question that maps at a scale score of 209 on Figure 4.6. This question asked students to explain how Romare Bearden creates contrast in his collage between interior and exterior areas. Scoring of responses to this question allowed for partial credit by using a three-level scoring guide. Mapping a question at the 209 scale score indicates that at least 65 percent of the students performing at or above this point were likely to have achieved a score of 3 ("Acceptable") on the question. Among students with lower scores, less than 65 percent were likely to have given acceptable responses to the question.

In Figure 4.6, there are numerous occasions when points on the Responding scale represent different scores achieved by students for the same question. For example, the exercise just discussed that maps at a scale score of 209 indicates that at least 65 percent of students performing at or above this point were likely to have been able to explain how Bearden creates contrast. Hence, these students were likely to have achieved a score of 3 for this exercise. However, at the 157 point on the scale, a lower score of 2 for the same question is represented; i.e., at least 65 percent of the students performing at or above 157 on the Responding scale were likely to have been able to identify a difference between the interior and exterior areas in the collage, but not explain how the artist achieved contrast between those areas.

The Visual Arts Responding Item Map

As explained above, the NAEP visual arts scale, ranging from 0 to 300, summarizes the overall Responding score results of students. The following descriptions of students' Responding knowledge and skills in visual arts are based on sets of questions that were answered successfully by students performing within three ranges on the scale. These ranges represent lower-, middle-, and upper-level performances based on percentiles.[4] (These ranges are also visually represented on the item map in Figure 4.6).

Students in the Lower Range of the Responding Scale

Students who were in the lower range of the visual arts scale (points 0 to 129) were able to make some rudimentary observations about the technical aspects or subjects of artworks, such as a quality of color in a Schiele self-portrait or the presence of a factory in a Bearden collage. They were able to offer sparse interpretations of what an artist may have been trying to communicate in a work of art. They were also able to make simple inferences about package design, for example, an advantage of mailing a poster in a mailing tube.

Students in the Middle Range of the Responding Scale

Students who were in the middle range of the visual arts Responding scale (points 130 to 173) showed sufficient technical knowledge to be able to identify one characteristic of charcoal in a Kollwitz self-portrait. They could make some observations about, and comparisons of, works of art in terms of concepts like near and far and realism or a lack of realism. These students were able to make some initial connections between technical aspects of works and their expressive qualities, linking characteristics like color with what they intended to convey in their own self-portraits. They were also able to apply simple design principles to describe some important characteristics of their own designs for a package to carry a fish on a bicycle.

Students in the Upper Range of the Responding Scale

Students who were in the upper range of the visual arts Responding scale (points 174 to 300) showed solid knowledge and skills in observing and describing technical aspects of works of art and relationships between technical and expressive aspects of works. They were able to support interpretations of a Schiele self-portrait and a Kendall mother and child portrait with specific references to characteristics such as line, composition, background, and color. They were also able to identify

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4 A percentile is a scale score below which a specified percentage of the population scored. For example, the 25th percentile as given in Figure 4.6 is 129. Twenty-five percent of students had scale scores of 129 or lower. Similarly, the 75th percentile as shown in Figure 4.6 is 173. Seventy-five percent of the students had scale scores of 173 or lower. Equivalently, 25 percent of the students had scale scores above 173.

- three aspects of their own self-portraits that conveyed something about their personalities. These students knew the historical and cultural contexts for several works of art, and could identify the genre of a Bearden collage and the historical period of a mother and child portrait. They could also clearly and thoroughly describe and compare works of art in terms of concepts like near and far and realism or a lack of realism. Students in the upper level of the scale were able to apply design principles to analyses of the operation and materials of their own designs for a package to carry a fish on a bicycle.

Profile of Students' Visual Arts Experiences

Figure 4.7 provides some context for understanding the range of student performance represented on the item map and described previously by "profiling" students who fell into the lower, middle, and upper ranges on the visual arts Responding scale.[5] The profile represents these students in terms of their own descriptions of their visual arts studies. As part of the NAEP 1997 Visual Arts Assessment, students were asked a series of questions about the nature and extent of their visual arts instruction, as well as their visual arts-related experiences outside of school. The results of these questions provide a picture of the sorts of activities students do when learning and engaging in visual arts.

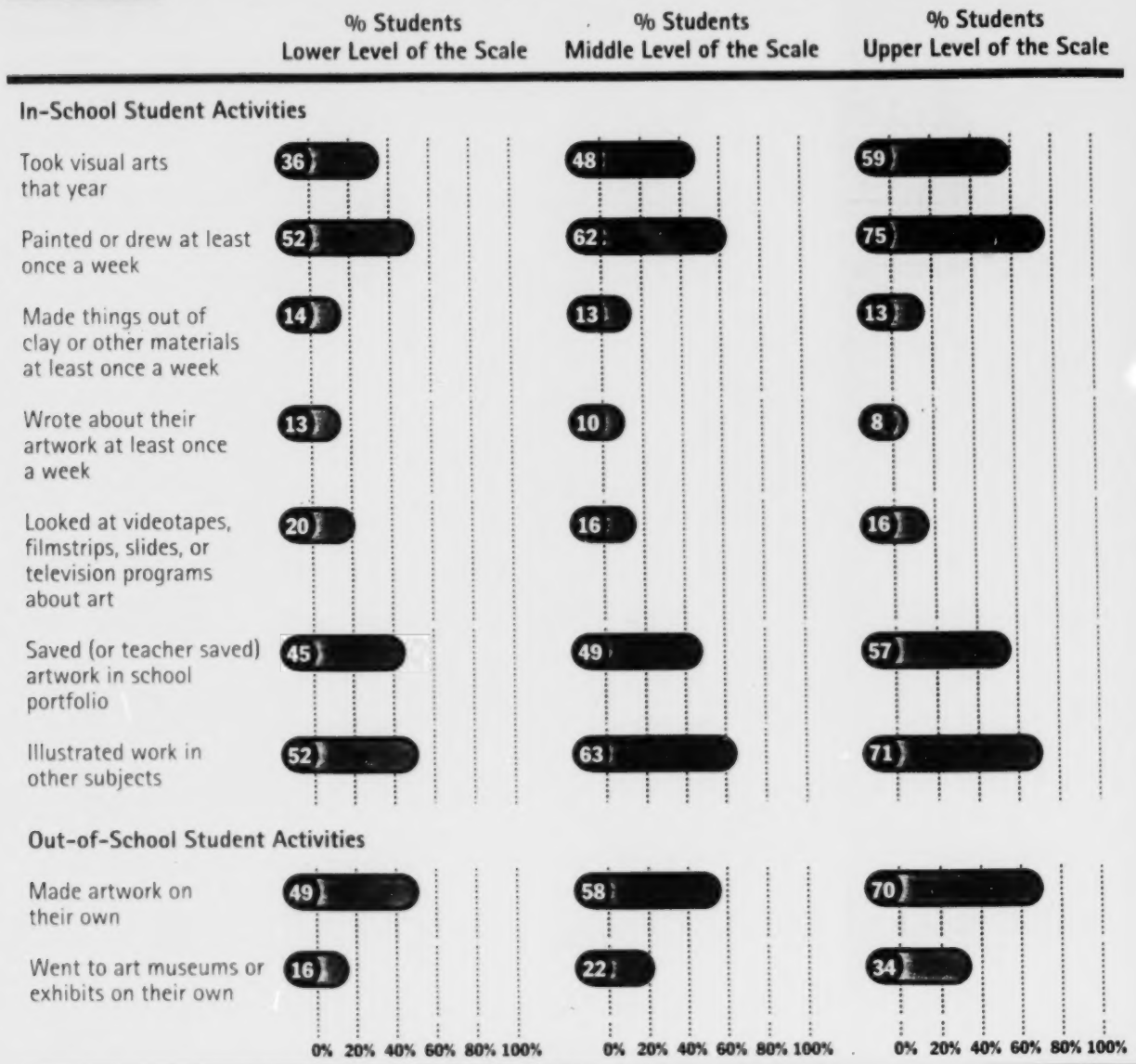
An examination of the profile reveals a common pattern: in-school activity is positively associated with student performance. A significantly larger percentage of students in the upper level of the Responding scale than in the lower level of the scale were taking visual arts. Similarly, a significantly larger percentage of students in the upper level of the Responding scale than in the middle and lower levels of the scale painted or drew at least once a week. The percentage of students in the middle level of the scale who painted or drew at least once a week was also significantly larger than the percentage of students in the lower level of the scale who did so.

There were no significant differences among percentages of students in the lower, middle, and upper levels of the Responding scale who made things out of clay or other materials at least once a week. However, although it does not appear in the profile, the percentage of students in the upper level of the Responding scale who made things out of clay or other materials once or twice a month was significantly larger than the percentages of students in middle and lower levels of the scale who did so. The pattern was the same for percentages of students who watched videotapes, filmstrips, slides, or television programs about art. While there were no significant differences among percentages of students who looked at such media at least once a week, there were significant differences among percentages of students who did so once or twice a month. (Again, readers are cautioned against drawing causal inferences from these results.)

Assessment results show that keeping a portfolio bears a positive relationship to performance. The percentage of students in the upper level of the Responding scale who saved their artwork (or whose artwork was saved by their teachers) in portfolios was significantly larger than the percentages of their peers in both the middle and lower levels of the scale who saved their artwork in portfolios. This may be of interest to arts educators who believe that

5 The lower group comprised students whose scores fell into the lowest 25 percent of the population. The middle group comprised students whose scores fell into the middle 50 percent of the population. The upper group comprised students whose scores fell into the highest 25 percent of the population.

Figure 4.7 **Visual Arts Responding Profile of Percentages of Students in Lower, Middle, and Upper Levels of the Responding Scale, by Selected In- and Out-of-School Activities**



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

portfolios can help students evaluate and direct their own arts learning.[6] Also, a larger percentage of students in the upper level of the Responding scale than in the middle and lower levels of the scale illustrated their work in other subjects. This finding is of potential value to educators interested in integrating the arts with other subjects.[7] There were no significant differences in the percentages of students in the lower, middle, and upper levels of the Responding scale who wrote about their artwork at least once a week in school.

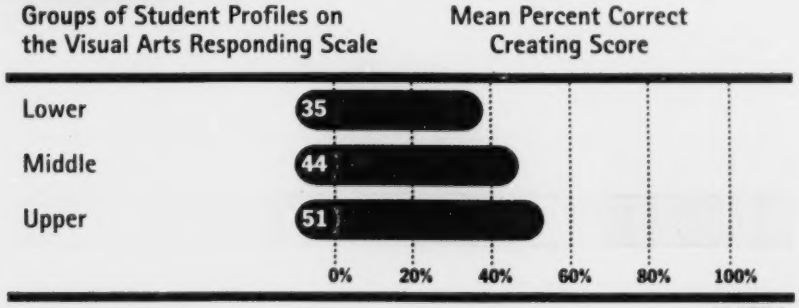
Finally, it is worth noting that doing artwork and going to art museums and exhibits outside of school were positively associated with student performance. For both variables, percentages of students in the upper level of the scale were significantly larger than percentages of students in the middle and lower levels of the scale, and percentages of students in the middle level of the scale were significantly larger than percentages of students in the lower level.

Relationships Between Student Visual Arts Creating and Responding Results

As previously explained, results for student Creating and Responding are not summarized together. However, to explore potential relationships between student results for the different processes, the average Creating scores for students in the lower, middle, and upper levels of the Responding scale are presented in Figure 4.8 below. As shown in the figure, there is a positive relationship between student performance on the Responding portion of the assessment and their Creating scores. Creating scores of students in the middle level of the Responding scale were significantly higher than scores of students in the lower level of the scale, and scores of students in the upper level of the Responding scale were significantly higher than scores of students in the middle and lower levels of the scale. This is interesting in light of the view that knowledge and skills necessary for Responding to visual arts overlap with those necessary for Creating in visual arts.

More detailed conclusions are not within the scope of this Report Card. Further research would be necessary to determine precisely how Creating and Responding abilities are related.

Figure 4.8 **Creating Mean for Lower, Middle, and Upper Responding Score Groups**



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

6 Wolf, D.P., and Pistone, N. (1991). *Taking full measure: Rethinking assessment through the arts.* New York: The College Board.

7 Armstrong, C. L. (1994). *Designing assessment in art.* Reston, VA: National Art Education Association, 32.

Boston, B.O. (1996). *Connections: The arts and the integration of the high school curriculum.* New York: The College Board and The Getty Center for Education in the Arts.

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visual arts

Part Three

Sample Tasks from the Visual Arts Three-Dimensional Creating Blocks

The Metamorphosis and Kitchen Sculpture tasks both required students to explore three-dimensional artwork in real space. Students created sculptural works using materials such as plasticine and other materials. (Examples of these works are found on the CD-ROM version of this report.)

Because of the quantity of student works and their fragility, these works could not be shipped to a scoring site. Instead, the artworks were photographed for later scoring. Assessment administrators were given careful training in how to photograph student works from both a close-up and a more distant view. Administrators were also instructed to take four shots of each artwork from different 30 degree angles, to capture as much of the work as possible.

Even so, it was not possible to get lighting conditions and the kind of photographic accuracy that would have guaranteed very clear views of all student works. Administrators did their best to photograph artworks in school classrooms.

Raters used the photographs to score three-dimensional student works. Even when looking at actual works, agreeing on scores was challenging because of the variety of students' solutions to visual problems, the wide range of student abilities, and the range of views about qualities of artworks. Using photographs to score increased this challenge. For this reason, readers are asked to keep in mind the challenge in making judgments about student works when encountering scores assigned to students.

The assessment scoring circumstances also explain references in the text to giving students the benefit of the doubt when an aspect of a work is somewhat unclear. Raters tended to score supportively, on the assumption that characteristics of student works may have been obscured in photographs.

Figure 4.9 **Sample Questions and Student Responses from the "Metamorphosis" Block are found on the CD-ROM version of this report.**

Figure 4.10 **Sample Questions and Student Responses from the "Kitchen Sculpture" Block are found on the CD-ROM version of this report.**

Part Four

Summarizing Visual Arts Creating Results

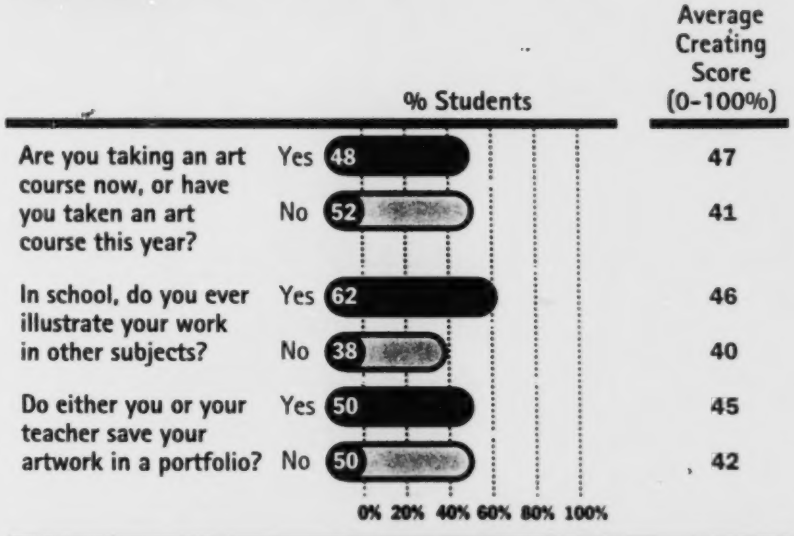
In this section, visual arts Creating results are discussed in terms of total (or "aggregate") scores.[8] These scores represent averages based on student performances on each Creating task. The relationships of these averages to opportunity-to-learn variables are presented in Tables 4.1 to 4.5. As shown in the tables, there is often a positive relationship between these opportunity-to-learn variables and student Creating results. Students reporting greater opportunities to learn about visual arts exhibited higher average Creating scores than students reporting fewer opportunities.

Visual Arts Course Taking and Activities at School

Table 4.1 features results for students who indicated whether or not they had taken a visual arts course; illustrated their work in other subjects; or saved their work in a portfolio. Nearly half (48 percent) of students indicated that they were taking a visual arts course, or had taken one that year. Sixty-two percent of students indicated that they illustrated their work in other subjects. Finally, about one half of students saved their work (or had their work saved for them by teachers) in portfolios.

Coursework in visual arts had a positive relationship to student average Creating scores, as did the other two activities. Students who indicated that they were taking or had taken an art course that year had higher average Creating scores than did students who indicated that they were not taking, or had not taken, such a course. Further, students who illustrated their artwork in other subjects outperformed their peers who indicated they did

Table 4.1 **Percentages of Students and Average Creating Scores by Students' Involvement in Various In-School Art Activities**



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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8 Creating tasks are not summarized using a standard NAEP scale. A measurement requirement for scaling assessment results is that there be a sufficient number of students taking a given group of exercises and a sufficient number of exercises of a given type to be scaled. This was not the case for the Creating exercises. Although they consumed far more assessment time than written exercises, there were fewer exercises to group together into a scale.

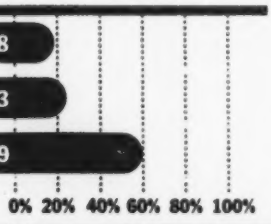
not, a result interesting in light of recent ideas about the possible value of cross-disciplinary arts activities for educational achievement.[9] Students who saved their artwork (or had their artwork saved by a teacher) in a portfolio also had higher Creating scores than did students who indicated they did not. This finding may be useful to arts educators who believe that portfolios can help students to evaluate and direct their own arts learning over time.[10]

Students' arts learning can be encouraged by exhibiting student artwork.[11] Table 4.2 presents results for students who indicated how often their teachers exhibited their artwork. Eighteen percent of students indicated that their teachers exhibited their work once or twice a month, and 23 percent indicated that their teachers exhibited their work once or twice a year. Fifty-nine percent of students never or hardly ever had their artwork exhibited. Those students whose artwork was exhibited once or twice a year had higher average Creating scores than students whose work was never or hardly ever exhibited.

Table 4.3 features how many times students had gone with their class to an art museum, gallery, or exhibit. Opportunities to look at actual works can increase students' understanding and appreciation of the nature of art and artmaking, as well as the social and historical contexts of artworks. While 21 percent of students indicated that had gone with their class one or two times in the last year to such exhibits, 2 percent indicated that they had gone three or more times. Seventy-eight percent of students indicated that they had not gone to such exhibits in the last year. There were no relationships between these frequencies of visits and student scores.

Table 4.2 **Percentages of Students and Average Creating Scores by Frequency of Exhibiting Artwork**

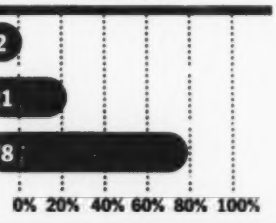
How often does your teacher have you show your artwork in an exhibit?	% Students	Average Creating Score (0–100%)
Once or twice a month	18	45
Once or twice a year	23	47
Never or hardly ever	59	42



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 4.3 **Percentages of Students and Average Creating Scores by Frequency of Visits to Art Museums, Galleries, or Exhibits**

In the last year, how many times did you go with your class to an art museum, gallery, or exhibit?	% Students	Average Creating Score (0–100%)
3 or more times	2	—
1 or 2 times	21	44
None	78	44



NOTES: Percentages do not sum to 100 due to rounding.
— Sample size is insufficient to provide a reliable estimate.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

9 Armstrong, C.L. (1994). *Designing assessment in art*. Reston, VA: National Art Education Association, 32.

Boston, B.O. (1996). *Connections: The arts and the integration of the high school curriculum*. New York: The College Board and The Getty Center for Education in the Arts.

10 Wolf, D.P., and Pistone, N. (1991). *Taking full measure: Rethinking assessment through the arts*. New York: The College Board.

11 National Center for Education Statistics. (1995). *Arts education in public elementary and secondary schools* (Publication No. NCES 95-082). Washington, DC: US Department of Education, 23. (See also http://nces.ed.gov/surveys/frss.html)

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Classroom Instruction in Visual Arts

Some kinds of classroom instruction in visual arts had a generally positive relationship to student scores. Table 4.4 presents the frequencies for various kinds of classroom arts activities. Students were asked most frequently to paint or draw: 63 percent of students were asked to do so at least once or twice a week. The next most frequent activity was talking with others about their artwork or that of other students, an encouraging finding given the opinion of some educators that discussion about their artwork among students contributes to students' enthusiasm for creating and abilities to create.[12] Thirty-three percent of students were asked to do so at least once or twice a week, and 17 percent once or twice a month. Relatively few students (13 percent) were asked to make things out of clay or other materials at least once or twice a week. One-quarter of students were asked to make things out of clay or other materials once or twice a month, and 62 percent were never or hardly ever asked to do so. The infrequency of working with three-dimensional media is consistent with the small percentages of students who scored above the Partial level on the three-dimensional Creating tasks in the assessment.

Of the activities shown in Table 4.4, writing about artwork was very infrequent. Seventy-nine percent of students were never or hardly ever asked to do so.

The pattern of results in Table 4.4 suggests a generally positive relationship between visual arts activities and student scores. Students who were asked to paint or draw at least once a week outperformed those who were asked to do so once a month and never or hardly ever. Further, those who were asked to paint or draw once a month outperformed those who were never or hardly ever asked to do so. Students who were asked to make things out of clay or other materials at least once a week, and those who were asked to do so once a month, had higher average scores than did students who were never or hardly ever asked to do so. Also, students who were asked to talk with others about their own artwork or that of other students at least once a week had higher average scores than their peers who were never or hardly ever asked to do so. Finally, students who were asked to look at videotapes, filmstrips, slides, or television programs about art once a month outperformed students who were never or hardly ever asked to do so.

12 Winner, Ellen, et. al. (1992). *Arts propel: A handbook for visual arts.* Educational Testing Service and the President and fellows of Harvard College (on behalf of Project Zero, Harvard Graduate School of Education).

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Table 4.4 **Percentages of Students and Average Creating Scores by Students' Reports on the Frequency With Which They Engage in Various Visual Art Activities**

When you have art in school, does your teacher have you do the following things?

Paint or draw	% Students	Average Creating Score (0–100%)
At Least Once a Week	63	46
Once a Month	17	42
Never or Hardly Ever	20	38

Make things out of clay or other materials	% Students	Average Creating Score (0–100%)
At Least Once a Week	13	46
Once a Month	25	46
Never or Hardly Ever	62	42

Talk with others about your artwork or that of other students	% Students	Average Creating Score (0–100%)
At Least Once a Week	33	46
Once a Month	17	45
Never or Hardly Ever	50	42

Write about your artwork	% Students	Average Creating Score (0–100%)
At Least Once a Week	10	42
Once a Month	11	43
Never or Hardly Ever	79	44

Look at videotapes, filmstrips, slides, or television programs about art	% Students	Average Creating Score (0–100%)
At Least Once a Week	17	44
Once a Month	28	46
Never or Hardly Ever	55	42

Work with a camera, computer, or Xerox to make artwork	% Students	Average Creating Score (0–100%)
At Least Once a Week	23	44
Once a Month	19	44
Never or Hardly Ever	58	43

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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visual arts

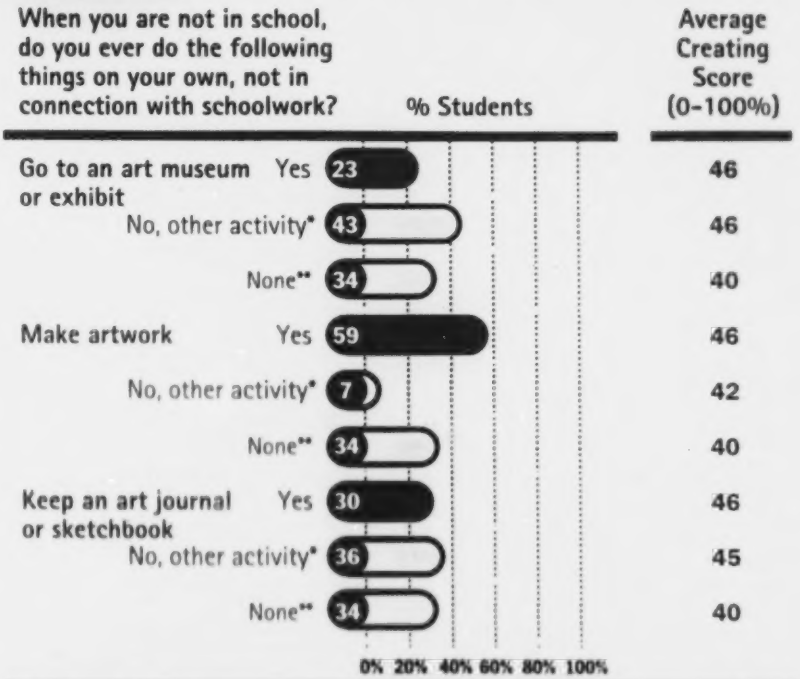
Out-of-School Visual Arts Activities

Table 4.5 features results on student involvement in visual arts activities outside of school. Results are presented for three activities: going to art museums or exhibits, making artwork, and keeping an art journal or sketchbook. For each activity the table presents the percentages of students who: (1) indicated engaging in that activity, (2) did not engage in that activity but did indicate engaging in one of the other activities listed and (3) did not engage in any of the listed activities.

As shown in the table, 59 percent of students indicated that they made artwork on their own outside of school. Twenty-three percent of students indicated that they went to art museums or exhibits on their own, and 30 percent that they kept an art journal or sketchbook on their own.

Involvement in out-of-school arts activities had a positive relationship to average Creating scores. For each of the three activities, students who reported engaging in the activity had higher average Creating scores than students who had not engaged in any of the activities. With the exception of making artwork, students who engaged in at least one of the other activities also had higher Creating scores than students who had not.

Table 4.5 **Percentages of Students and Average Creating Scores by Students' Reports on Their Involvement in Various Out-of-School Art Activities**


When you are not in school, do you ever do the following things on your own, not in connection with schoolwork?
% Students
Average Creating Score (0-100%)
Go to an art museum or exhibit
Yes 23 46
No, other activity* 43 46
None** 34 40
Make artwork
Yes 59 46
No, other activity* 7 42
None** 34 40
Keep an art journal or sketchbook
Yes 30 46
No, other activity* 36 45
None** 34 40
0% 20% 40% 60% 80% 100%

NOTES: * The percentage and score in this row are representative of that portion of the sample that did not respond "Yes" to this activity, but did indicate doing one or more of the other activities in Table 4.5. For this series of background questions respondents were to indicate only those statements that were applicable.
** The percentage and score in this row are representative of that portion of the sample that did not respond "Yes" to any of the activities.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

visual arts

Summary

The preceding sections of this chapter presented different kinds of information about students' knowledge and skills in visual arts, as well as students' arts educational experiences in (and out of) the classroom. Several points of interest emerged from this discussion.

Patterns of Student Performance[13]

Patterns of students' knowledge and skills in Responding and Creating varied. Some kinds of tasks seemed more accessible to students, and others more difficult for both Responding and Creating.

Responding

- Students were able to accurately describe some aspects of artworks. For example, 34 percent of students could identify two traits of charcoal in a Kollwitz self-portrait, and 49 percent could identify an accurate description of the composition of a Bearden collage. Similarly, 29 percent of students could describe three ways Raphael created a sense of near and far in a Madonna and Child painting, and 53 percent were able to identify two ways.
- Recognizing subtler aspects of composition seemed difficult for students. Twenty-two percent could identify and describe the contribution of an unusual aspect of the Bearden collage to the whole work, and 14 percent of students could explain how Bearden created contrast between interior and exterior space in the collage.
- Students' abilities to place artworks in historical and cultural contexts varied. For example, while 55 percent of students could identify which of four works was a work of contemporary Western art, 25 percent could identify which of four works contributed to Cubism.
- Generally, linking aesthetic features of artworks explicitly with meaning seemed challenging to students. Four percent of students could write a brief essay linking a full analysis of aspects of a Schiele self-portrait to an interpretation, while 24 percent were able either to link sparser analyses to interpretations, or to analyze aspects of the self-portrait without an interpretation.
- Students showed some abilities to link form with function in design. In two instances, 32 percent of students were able to accurately infer and describe advantages of the designs of packages from a set of photographs.

Creating

- Creating specific, fully observed, and expressive two-dimensional artworks was challenging for students. Five percent created self-portraits that showed sensitive use of materials, details, and compositional awareness. One percent of students created expressive collages that showed a consistent awareness of qualities such as color, texture, and contrast. However, 40 percent of students were able to convey aspects of personality expressively and ably in parts of their self-portraits, and 42 percent of students were able to effectively use collage techniques in parts of their collages.
- Exploring the relationship between form and function in Creating yielded varied results. In a task asking students to design a package to safely transport a fish while riding a bicycle, 16 percent of students clearly conveyed in a drawn design how the package would protect the fish and retain water, and 27 percent of students clearly indicated how the package attached to the bike. (The best fish-package designs often featured more than one view and clear notes explaining relevant aspects of the design.) Results for a task

13 Some of the descriptions that follow refer to exercises and student responses found on the CD-ROM version of this report.

asking students to link form and function to create a package for a sound (a scream or whisper) were closer to those for non-design tasks. Seven percent of students were able to create "scream" or "whisper" packages that conveyed their contents clearly to a viewer and that utilized colors, patterns, and graphics to unify the three-dimensional space of a box into a whole package. Twenty-three percent of students were able to create less unified packages that communicated their contents more vaguely.

- Students seemed to find applying their knowledge and skills to three-dimensional tasks challenging. Approximately 10 percent of students were able to manipulate plasticine to create skillful and expressive sculptures showing the transformation of a man to a fish. Far more students (approximately a third to a half) created forms that were somewhat vague and that conveyed little movement or gesture.[14]
- Three percent of students were able to create freestanding sculptures out of plasticine and wire that skillfully combined shapes, details, and textures into an imaginative interpretation of kitchen utensils. Many more students (21 percent) created sculptures that were not freestanding or that showed some ability to realize an idea in an inventive, organized interpretation.

Self-Evaluation Responses

Chapter 4 also explored students' responses to self-evaluation questions about their own two-and three-dimensional works. Interestingly, relationships between students' abilities to express themselves in written form about their Creating, and the quality of their Creating work, were not predictable. There are many factors that could account for this. One could be a lack of time for students to focus on commenting upon their work after finishing a Creating task. Another could be varying levels of exposure to evaluating their own artworks. More research would be needed to explore fully the relationship between students' abilities to Create and their capacities to evaluate their creations in writing.

Variation was also seen in student sketches of ideas and the realization of those ideas in three dimensions for the Monument task and the Kitchen Sculpture task. While some students received high scores for both the 2-D and the 3-D components of these tasks, many others were stronger in one or the other. Again, more in-depth research would be needed to determine more accurately relationships between students' abilities to create in two and three dimensions.

Students' In-School Visual Arts Experiences

In order to create a context for students' Creating knowledge and skills, students' reports of their in-school (and out-of-school) arts activities were explored in Chapter 4. For both Responding and Creating, in-school arts activity is often positively associated with arts achievement.

- A significantly larger percentage of students in the upper level of the Responding scale were currently taking visual arts than were their peers in the lower level. Similarly, significantly larger percentages of students in the upper level of the Responding scale painted or drew at least once a week, worked with clay once a month, and saved their artwork in portfolios than did percentages of their peers in the middle and lower levels.
- Students who indicated that they were currently taking or had taken an art class that year had higher average Creating scores than did students who indicated that they were not taking, or had not taken, such a course. Students who were asked to paint or draw, and those who were asked to make things out of clay or other materials at least once a week, outperformed those who were asked to do so once a month and never or hardly ever. Further, students who saved their artwork in a portfolio outperformed their peers who indicated that they did not do so.

14 These percentages are approximate because they summarize results for four scoring guides.

Chapter Five

dance

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Chapter Five

Creating, Performing, and Responding in Dance: A Close Look at the Exercises for the NAEP 1997 Dance Assessment

The Content of the Dance Assessment

As previously explained, the grade 8 assessment developed for dance was not administered. Results from the 1995 grades 4 and 8 NAEP field test in dance indicated that comprehensive dance programs are rare in the nation's schools. This is also the case according to the National Center for Education Statistics publication, *Arts Education in Public Elementary and Secondary Schools.*[1]

Those schools that do offer dance do not always teach a wide range of dance forms, or studies of dance aesthetics and the social, cultural, and historical contexts of dance. Many students of dance pursue their activities in classes outside a school context.

To ensure that students taking the dance assessment would have some solid exposure to dance, a range of arts policymakers, members of the National Center for Education Statistics, the National Assessment Governing Board, and dance teachers decided that students taking the dance assessment should be chosen from schools offering a reasonably comprehensive dance program. In this way, assessment results would supply rich information about what students exposed to dance in schools know and can do.

A lengthy process was undertaken to identify what number and kinds of dance course work ought to characterize students in the dance sample. NAEP staff responsible for identifying and locating NAEP samples and administering NAEP assessments worked extensively with dance policymakers and teachers to make these decisions, and then to locate a sample of schools and students with the national distribution necessary for NAEP assessments. After much effort, it was found that, given the nature of dance education, a statistically suitable sample could not be located.

So that readers will have a picture of the performance assessment in dance that was developed based on the arts framework, the dance exercises that were intended for administration to students are included in this *Report Card.* (The lessons learned from the development, administration, and scoring of the 1995 and 1997 dance field tests will be featured in the *NAEP Arts Process Report.*)

These exercises were created to reflect the view of a complete dance education presented in the (voluntary) *Standards for Education in the Arts* and the NAEP *Arts Education Assessment Framework.* According to these documents, significant dance learning in schools should include Creating, Performing, and Responding.

1 National Center for Education Statistics. (1995). *Arts education in public elementary and secondary schools.* Publication No. NCES 95-082. Washington, DC: U.S. Department of Education. (See also http://nces.ed.gov/surveys/frss.html)

In a comprehensive dance program, students would learn how to convey ideas and feelings using movement and elements of choreography. They would be taught dance knowledge, skills, and techniques that would enable them to use their bodies with confidence and insight when Creating and Performing. Through being taught how to Create and Perform, students would gain spatial and bodily awareness, musicality, and an ability to observe and refine movement.[2]

In learning how to Respond to their own dance work or that of others, students would be taught how to identify compositional elements; notice details; identify stylistic, cultural, social, and historical contexts of dance; and make informed critical observations about technical and artistic components of dance.[3]

Creating the NAEP dance assessment posed interesting challenges. In educational settings, students and teachers of dance can discuss and experiment with different ways of solving movement problems to communicate ideas and feelings. This is not the case in a timed assessment. To give students as much of an opportunity as possible to demonstrate their dance knowledge and skills, it was necessary to create context for the assessment exercises. This was done in three important ways.

First, instructions for Creating and Performing tasks were carefully crafted to lead students through complex exercises step by step. This included extensive warm-up exercises to prepare students to dance, and as much information as possible about what students were being asked to demonstrate. At the same time, instructions were designed not to "overteach" students, and hence damage assessment results.

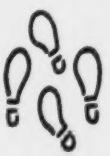
Second, since a substantial part of dance instruction involves understanding and learning movement from live demonstration, trained dancers and dance educators were to administer and lead students through the dance Creating and Performing tasks. This would help to increase students' comfort level with dancing in an unfamiliar context. Third, Responding exercises were built around videotape selections from two, three, or at most four dances, so that students could focus their attention on a small selection of works. This would give students the opportunity to think more deeply about the assessment tasks, and ensure that students would not be asked isolated questions about unrelated dances.

An overview of the grade 8 dance assessment "blocks" (a group of exercises administered as separate units to be completed in a set time frame) is presented in Figure 5.1. As shown in the figure, the assessment consists of five blocks. Three of those blocks feature Responding exercises. These are multiple-choice and constructed-response questions asking students to analyze, describe, and identify different aspects of dance. The dances students are asked to observe represent a wide range of cultures, genres, and historical periods. The remaining two blocks consist of a Performing block asking students to learn a dance phrase and a Creating/Performing block asking students to create and perform a brief composition.

2 National Assessment Governing Board. (1994) *Arts Education Assessment Framework* (pre-publication ed.) Washington, D.C.: Author, 22-23.

3 Ibid.

Figure 5.1 **The Content Description of the NAEP Dance Assessment**

Block Name	
"Philippine" (Responding block)	Students view segments of three videotaped dances (a Philippine Singkal dance, an Irish step dance, and a West African dance) and apply their knowledge of dance elements, such as movement qualities and choreographic techniques, to the dances.
"Eagle" (Responding block)	Students view segments of two videotaped dances (an American Indian dance and a Russian folk dance) and apply their knowledge of dance elements, such as movement qualities, choreographic techniques, and cultural and stylistic contexts, to the dances.
"White Web" (Responding block)	Students view segments of three dances from the movie *White Nights*, with Gregory Hines and Mikhail Baryshnikov. The segments include examples of both jazz and modern dance. Students apply their knowledge of dance elements, such as movement qualities, choreographic techniques, and cultural and stylistic contexts, to the dances. Finally, students view a contemporary dance based on a spider motif (created for NAEP featuring six children) and write a brief review analyzing and evaluating the dance.
"Jazz" (Performing block)	After a warm-up, students are asked to learn an extended movement phrase that uses jazz steps from a dance facilitator. The students then perform the phrase, and their performances are captured on videotape. 
"Metamorphosis" (Creating/ Performing block)	After a warm-up, students are asked to work with a partner to create a movement sequence based on the idea of metamorphosis, using different compositional elements such as time, space, and energy. The students then perform their composition, and their performances are captured on videotape.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

The Blocks of the Dance Assessment

Figures 5.2 to 5.6 feature the exercises in each dance block intended for the grade 8 dance assessment. Figures 5.2 to 5.4 present all the exercises in each Responding block (Philippine, Eagle, and White Web). Figures 5.5 and 5.6 present the Performing block Jazz and the Creating/Performing block Metamorphosis. References are made to which aspects of the Framework each exercise in the five blocks is intended to measure.

This report (because of copyright restrictions) does not include all dance videotape segments intended for use in the Responding blocks. Descriptions are provided of dance segments that are not included. Readers should assume that students had the opportunity to watch each dance segment at least twice immediately before answering a question or group of questions about a particular segment.

Figure 5.2 Sample Questions from the "Philippine" Block

In this block, students observe three dances: a Philippine Singkal dance, an Irish Step dance, and a West African dance. These dances may be viewed on the CD version of this report. They can be found by clicking on the Philippine menu in the dance section or on the video icon below.

Video Link to Dances

Question 1 measures students' abilities to identify compositional elements in dance, relating the use of props to time and space in a performance.

1. Describe two specific ways the poles are an important part of the Philippine dance (Dance 1).

Question 2 measures students' abilities to analyze compositional elements in dance, such as time, space, and energy.

2. Describe the Philippine dance (Dance 1). In your answer, discuss in detail: use of timing (rhythm and tempo), use of space (how the dancers moved in and through the performance space and around one another); and the use of force/energy (the qualities and mood of the movements the dancers made).

   1. Use of timing:
   2. Use of space:
   3. Use of force/energy:

Question 3 measures students' abilities to make informed critical observations about technical and artistic components of dance in relation to shape.

3. Describe two specific ways the group of dancers in the Irish dance (Dance 2) physically connect to one another, and describe the shape the group forms each time the dancers connect.

   1. Way the dancers physically connect:
      Shape they form when they physically connect:
   2. Way the dancers physically connect:
      Shape they form when they physically connect:

Question 4 measures students' abilities to identify compositional elements in dance by comparing two dance compositions in terms of shape.

4. What group formation did the dancers make in both the Irish dance (Dance 2) and the West African dance (Dance 3)?

   (A) Lines
   (B) Semicircles
   (C) Square
   (D) Star

Question 5 measures students' abilities to distinguish movement styles (changes in the use of body parts, levels, and timing) in dances of different cultures.

5. Describe two specific differences between the ways the dancers use their upper bodies (torsos and arms) in the Irish and West African dances (Dances 2 and 3).

Question 6 measures students' abilities to identify compositional elements in dance by comparing two compositions in terms of the style of footwork.

6. Describe one difference and one similarity between the ways the dancers use their feet in the Irish dance (Dance 2) and in the West African dance (Dance 3).

Difference:

Similarity:

Question 7 measures students' abilities to identify compositional elements in dance by comparing two compositions.

7. Compare the dancers' facial expressions and the mood in the Philippine dance (Dance 1) with the dancers' facial expressions and the mood in the West African dance (Dance 3). Be specific.

Question 8 measures students' abilities to identify technical components of dance composition.

8. The performers' arms change levels in which dance?

(A) The West African only

(B) The Philippine and the Irish only

(C) The Philippine and the West African only

(D) The West African, the Philippine, and the Irish

Question 9 measures students' abilities to make informed critical observations about dance by comparing the movement qualities of several compositions.

9. Which dance or dances demonstrated the largest range of body movement?

(A) The West African

(B) The Irish

(C) The Philippine

(D) The Philippine and the Irish

Question 10 measures students' abilities to identify the compositional elements of dance by recognizing specific methods of choreography used in a performance.

10. Which kind of choreographic form was used in only ONE of the three dances?

(A) Solo movement

(B) Unison movement

(C) Canon movement

(D) Call-and-response movement

Figure 5.3 Sample Questions from the "Eagle" Block

In this block, students observe two dances. The first, called Eagle Dance, is performed by the American Indian Dance Theater (approximately 2 1/2 minutes). The piece is performed by male dancers wearing pants and capes made of feathers. The movements are soft and flowing and are intended to capture the movements of soaring eagles. The dance focuses primarily on the movements of the dancers' arms.

The second dance is a Russian folk dance performed in an outdoor setting in Russia. The dance is performed by a company of men and women dressed in traditional costumes (the men are wearing pants and shirts and the women are wearing dresses). The movements are traditional folk dance group formations (lines and circles of performers). The movements of the dance are very energetic.[4]

Question 1 measures students' abilities to analyze how technical elements contribute to the overall artistic impression of a performance.

1. Dance 1 is a Native American dance called Eagle Dance.
   Describe specific ways the scenery, lighting, costumes, and music contribute to the THEME and MOOD of Eagle Dance.

   Scenery: Lighting:

   Costumes: Music:

Question 2 measures students' abilities to identify and evaluate the visual impact of specific movements in a performance.

2. Describe in detail two of the movements from the dance that suggest a bird flying.

Question 3 measures students' abilities to identify compositional elements of a dance by noting the primary source of movement for the dancers.

3. What parts of their bodies do the dancers use most in this dance?

   (A) Heads
   (B) Hips
   (C) Arms
   (D) Backs

Question 4 measures students' abilities to identify and evaluate the impact of specific elements on a dance.

4. Which of the following elements is most important to the dance?

   (A) The variety of floor patterns
   (B) The variety of individual movements
   (C) The flowing quality of the movements
   (D) The interactions among the dancers

Question 5 measures students' abilities to identify the compositional elements of a dance by describing the elements of movement that result in changing levels.

5. The dancers change the level of their dancing by

   (A) jumping into the air
   (B) falling to the floor
   (C) bending backward
   (D) bending their knees

4 These dances are not available for viewing on the CD due to copyright restrictions.

Question 6 measures students' abilities to make informed critical observation about the technical and artistic components of dance by evaluating time, space, movement quality, and the interactions of dancers in a performance.

6. Think about how Dance 2 is an energetic, lively dance.
Describe in detail HOW each of the following elements makes Dance 2 an energetic, lively dance.

- Use of timing (rhythm and tempo)
- Use of space (movement in and through the performance space)
- Specific movements
- Specific ways the dancers dance with one another

Question 7 measures students' abilities to identify specific movement elements in a performance.

7. Near the middle of the dance, eight men dance in a circle together. What kind of movements do they do in that circle?

(A) Skips
(B) Jumps
(C) Full body turns
(D) Walking movements

Question 8 measures students' abilities to identify the context of a dance by describing the cultural influences apparent in the dance's style.

8. Which word below best describes the type of dance you have just seen?

(A) Religious
(B) Folk
(C) Theatrical
(D) Improvisational

Question 9 measures students' abilities to contrast the use of space and movement in two dance compositions.

9. Describe two specific differences between the ways the dancers move in and through the performance areas in the two dances.

Question 10 measures students' abilities to make informed critical observations about dance by comparing elements of movement, space, interaction, and style in two dance compositions.

10. How are Dance 1 and Dance 2 similar to each other?

(A) The dancers use similar kinds of energy in both dances.
(B) The dancers use a lot of performance space in both dances.
(C) The dancers dance with partners in both dances.
(D) The dancers change levels in both dances.

Question 11 measures students' abilities to recognize dance vocabulary and to make an informed critical observation about the technical components of dance by comparing specific movements in two dance compositions.

11. Which movement or movements do the dancers do in both dances?

(A) Turning
(B) Skipping
(C) Slow knee bends
(D) High kicks

Figure 5.4 Sample Questions from the "White Web" Block

In this block, students watch different dances from the film *White Nights*. The first dance is a solo performed by Mikhail Baryshnikov on the stage in the Kirov Theater. This is modern dance with a strong emotional feeling. Baryshnikov is wearing black pants and a white shirt. The segment begins when Baryshnikov does a back fall into an asymmetric shape, and continues until the point where he uses a back somersault to come up from the floor to a standing position with his toes curled under and his upper body tightly closed. [30 seconds]

The second dance is a tap solo by Gregory Hines performed to popular music. Hines performs this piece in a studio with a stained-glass ceiling. This segment begins with a shot of Hines' feet and continues until he does a huge sweeping run of the studio that ends with a slide onto the top of a grand piano. [55 seconds]

The third dance is a duet by Hines and Baryshnikov in a dance studio with a stained-glass ceiling. They are both wearing loose warm-up clothing. This dance combines elements of tap, ballet, and modern dance. The segment begins when they are close to the windows in parallel fourth position with the right arm held in front of the torso with the fist clenched. The segment continues until they complete two karate-like kicks followed by a jumping hitch kick and then a pause before they start dancing again. [45 seconds]

The fourth dance is a short dance created for NAEP featuring six young dancers: Three girls and three boys between the ages of 10 and 15, wearing standard dance tights and leotards, perform a lively, contemporary dance based on the theme of a spider building a web. [1 minute, 30 seconds][5]

Question 1 measures students' abilities to identify compositional elements of a dance and make informed critical observations about the dancer's use of technical components relating to space, movement elements, and movement qualities.

1. Which statement about the dancer in Dance 1 is true?

   (A) The dancer uses a lot of floor space.

   (B) The dancer makes many changes in level.

   (C) The dancer uses many body parts to support his weight.

   (D) The dancer uses light and flowing movement qualities.

Question 2 measures students' abilities to identify compositional elements of a dance and recognize their cultural source.

2. The movements in Dance 1 are similar to movements found in folk dances from which country?

   (A) Russia

   (B) England

   (C) Germany

   (D) Canada

Question 3 measures students' abilities to make informed critical observations about dance by evaluating the emotional impact of specific movements.

3. Think about how Dance 1 might communicate an intense feeling, like sadness or frustration. Identify TWO movements from the dance, and for each one, describe in detail how the dancer's performance of the movement communicates this kind of intense feeling. Use movement quality vocabulary if you know it.

5 The dances from *White Nights* are not available for viewing on the CD due to copyright restrictions. The dance made for NAEP was excluded due to space limitations on the CD-ROM.

Question 4 measures students' abilities to identify the cultural context of a dance.

4. What style of dance was this?

(A) Jazz

(B) Tap

(C) Clog

(D) Flamenco

Question 5 measures students' abilities to compare two dance compositions in terms of space and movement qualities.

5. Describe and compare the dancers' use of the performance space and the dancers' use of levels (heights) in Dance 1 and Dance 2. Identify specific movements each dancer performs to support your answer.

Question 6 measures students' abilities to make informed critical observations about dancers' movements.

6. The dancers turn in many different ways in Dance 3. Describe in detail two different kinds of turns that you saw the dancers do.

Question 7 measures students' abilities to evaluate dancers' use of space and movement qualities.

7. What is true about the dancers in Dance 3?

(A) They danced facing each other for the first part of the dance.

(B) One dancer was often in front of the other.

(C) One dancer followed a pathway in a different direction from the other dancer.

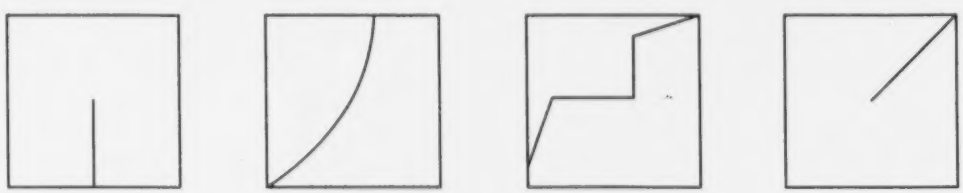
(D) The distance between the dancers remained constant throughout the dance.

Question 8 measures students' abilities to evaluate the basis of specific dance movements.

8. Dancers need many movement skills to perform a dance. Identify a step or movement from EACH of the three Dances 1, 2, and 3. Then describe a movement skill that is necessary to perform each step or movement you have identified.

Question 9 measures students' abilities to identify compositional elements of dance by identifying specific movement patterns in a performance.

9. Which drawings show the path the dancers follow in the very last part of Dance 4, just before they take their final positions?



(A) (B) (C) (D)

Question 10 measures students' abilities to identify compositional elements of dance as they relate to movement elements used in partnered dances.

10. Describe two different kinds of movement that the dancers make as partners in Dance 4.

Question 11 measures students' abilities to support their personal opinions about dance with appropriate and accurate evaluations of the skill of performers, use of space, variety, rhythm, movement quality, and energy.

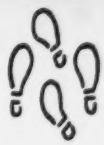
11. Imagine you must write an article reviewing Dance 4 for your school newspaper. In your review, you must tell your opinions of the choreography of the dance and the performance of the dancers. You must explain WHY you have those opinions using examples from the dance.

The second time you watch Dance 4, take brief notes on the paper you have been given to help you gather information for your review. Quickly write down what you notice about:

- how the dance is designed
- floor patterns
- connection among movements
- levels
- rhythm
- tempo (speed)
- the skill with which the dancers perform movements
- how well the dancers work together

AFTER YOU WATCH THE DANCE FOR THE SECOND TIME,
YOU WILL WRITE YOUR REVIEW ON THE LINES ON PAGE 11.
ONLY YOUR REVIEW WILL BE SCORED

Figure 5.5 Sample Task: the "Jazz" Block



In this task, students learn an extended movement phrase that uses jazz steps. The students first participate in a three-minute warmup and then are taught the jazz phrase in several sections by a dance facilitator. After they are taught the phrase, they are asked to perform it three times. The first time students perform it with the facilitator. They are then given 30 seconds to practice. The second time and third times they perform the dance on their own. The students in the front and back rows switch places for the third performance.

The task assesses students' abilities to accurately recall and reproduce movement, and to demonstrate physical technique and focus and expression. The criteria that students are scored on and the setup for the task are shown below.

1A. Student demonstrates awareness of rhythm by moving on the pulse (beat) of the music during key parts of the phrase.

1B. Student demonstrates the concept of isolating body parts (counts 3 & 4 of sections 1 & 2).

1C. Student accurately repeats the sequence of the entire movement phrase.

1D. Student demonstrates sustained reach (counts 9-11 in Section 2).

1E. Student demonstrates balance (counts 3-6 of Section 3).

1F. Student demonstrates jumps accurately (counts 11-12 in Section 3).

1G. Student demonstrates dynamics called for in the dance phrase.

Setup:

Four students are spaced in two staggered lines (see diagram below) so that the students can see the facilitator and be visible to the video camera. The space must be at least 20' x 20', and the entire room at least 30' x 40', so that the video camera can simultaneously focus on all four students within the performance area.

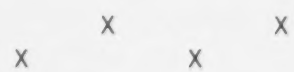


Figure 5.6 Sample Task: the "Metamorphosis" Block

In this task, students collaborate with a partner to create a movement sequence based on the idea of metamorphosis, using elements of dance composition including time, space, and energy. Students demonstrate an ability to collaborate with a partner to achieve solutions to a movement task, create and perform improvisational and compositional structures, replicate movement, perform with physical technique, and communicate through movement. The aspects of Creating and Performing that students are scored on are listed below.

1A. The dance begins and ends with a clear, still pose (scored in second performance only).

1B. The pair accurately repeats the sequence of the dance.

1C. The pair performs their dance together with smoothness, focus and expression.

1D. The pair demonstrates at least two clear, different shapes in the dance (not including beginning or ending pose).

1E. The pair demonstrates use of high, middle, and low movement levels in the dance.

1F. The dance incorporates the use of sharp and smooth movement qualities.

1G. Effectiveness of the dance as a whole.

The complete script for the Metamorphosis block is shown below.

Setup:

4 students Create and Perform in pairs

Performing space: 12' x 12'

Practice areas: Two 12' x 12' areas (one of these will also serve as the performing area).

Camera distance: 13' from center front line of 12' x 12' performing space

Buffer zone: 2' on each side

Total space needed: 30' x 26'

Alternate setup if space is limited:

No. of students: 2 (one pair)

Performing space and practice area: 12' x 12'

Camera distance: 13' from center front line of 12' x 12' space

Buffer Zone: 2' on each side

Total space needed: 30' x 14'

Administrative Script:

Today you'll be taking part in a special dance activity as part of the National Assessment of Educational Progress. Do the best you can for the task, and do not worry about how the other students are dancing. Focus on your own work.

We've asked you to wear colored vests so that we can tell you apart without using your names. So, if I need to call on you, I'll call you by the vest color that you are wearing.

Warmup:

Students were asked to do warmup exercises in the following categories: (This script was too long to be recreated in full here.)

Curling and uncurling the body

Swinging the arms

Swinging the legs

Twisting and untwisting the body

Twisting and untwisting arms, hands, and wrists

Twisting and untwisting legs and feet

Making waving movements with different parts of the body

Using a waving movement to move through space and go down to the floor

Administrative Script for Production Exercise:

For this dance activity, you will work in pairs to create, or choreograph, your own dance. Choreographers base their ideas for dances on many different things, for example, movements from different dance traditions, movements from nature, or events in their own lives.

The dance you will choreograph today will be based on the idea of METAMORPHOSIS. Metamorphosis means a change from one shape or form to another. Examples of metamorphosis are when a caterpillar becomes a butterfly, when a solid block of ice melts into flowing water, or when a raging fire burns something into a pile of ashes. You may know about metamorphosis from the stories and legends of many cultures, and also from movies, where you may have seen human beings change into animals or other forms.

You will work with a partner to create and perform a dance that shows metamorphosis. Use the kinds of metamorphosis I have mentioned to help you think about what kind of metamorphosis you would like to show in a dance. What change do you see in your mind when you think about metamorphosis? How could you show that change happening in a dance? What movements do you think of?

You will each create, practice, and then perform your metamorphosis dance in the taped spaces here. Notice the two X's in each space. Your dance must start at the X in the far corner of the performing space *[facilitator walks to and stands upstage right corner of the performance space, marked with a taped X]* and end in the near corner where the second X is *[facilitator walks to and stands downstage left corner, marked with a taped X]*.

This means you should think of your dance as a three-part dance. Your dance should have a part A that includes a clear beginning, a part B including a metamorphosis that happens along the way, and a part C that shows the change you have made and includes a clear ending.

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You must include the following in the structure of your dance: *[Facilitator points to the poster on the wall listing the criteria below and reads it out loud.]*

Take some time to think again about what change you see in your mind when you think about metamorphosis, and how could you show that change happening in a dance. As you work, try to develop those movements as we did in the warm-up. USE THE CHECKLIST TO HELP YOU CREATE YOUR DANCE, SO THAT YOU INCLUDE ALL THE REQUIREMENTS BEING ASKED FOR.

I will assign each pair to a space. Your dance must stay within the space to which you are assigned. *[Facilitator assigns students to two pairs, and then each pair to a space. Facilitator should be aware if students dance outside of the taped space and should advise them to stay within the area.]* Work to create and practice performing your dance in that space.

CHECKLIST! YOUR TRANSFORMATION DANCE MUST:

- BEGIN with a CLEAR, STILL POSE
- DEVELOP using
  - TWO different SHAPES (using the whole body)
  - THREE different LEVELS (high, middle, low)
  - ONE pair of MOVEMENT TYPES: (sharp and smooth),
- END in a CLEAR, STILL POSE.

You will have ten minutes to create a metamorphosis dance with your partner. We will help you keep track of the time you have to work. Make sure you use part of the time to PRACTICE your finished dance, so that you can perform your dance together with smoothness, focus, and expression. You must also be able to remember your dance because you and your partner will be asked to perform your dance the same way twice. After you perform, we will ask you to tell us what kind of metamorphosis you were showing.

Begin creating your dance now. Please work only with your partner.

[Students have ten minutes to create their partner dances. Camera should be on and filming students as they work together. Facilitator announces the time remaining.]

You have six minutes more.

You have three minutes more; make sure to practice performing your dance from start to finish.

You have one minute more.

OK, everyone please stop working and come over here. *[Facilitator gathers students near one of the performance/practice areas.]* Each pair will now perform its dance twice. You must stay within the taped area as you perform. This pair will go first. *[Facilitator chooses one of the pairs to go first. The facilitator then addresses the following to the nonperforming pair:]* So that you won't be influenced by watching other students perform, please sit in these chairs facing away from the performance area. The other pair of students will do the same while you are performing. *[The nonperforming pair is asked to sit with their backs to the performing space. Camera should be on, filming, and positioned so that it can capture the performing pair.]*

When you are performing, remember to focus on what you are doing and to express your dance fully. Please begin your dance when I say "begin." Get ready. Begin.

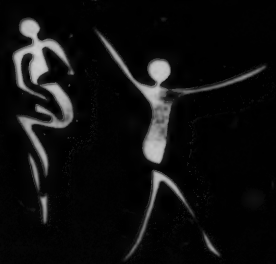
I will tape your dance one more time, so please go back to your starting places. When you are performing, remember to focus on what you are doing and to express your dance fully. Please begin the dance when I say "Begin." Get ready. Begin.

Now that you are done, can you please tell us what kind of metamorphosis you were showing in your dance?

[When first pair is done, they should be asked to sit with their backs to the performing area until the second pair is done. Facilitator goes through same script with second pair.]

[When both pairs of students are done, the facilitator should thank them for their participation in the assessment before they are taken back to their classrooms.]

Chapter Six



Results for the nation

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Chapter Six

Results for the Nation: Performance of Selected Student Subgroups in Music, Theatre, and Visual Arts

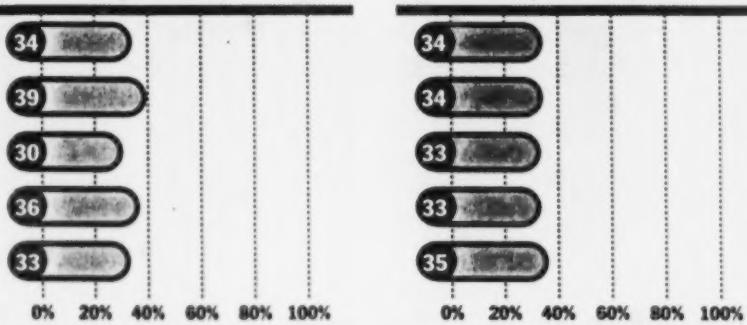
This chapter presents overall Creating, Performing, and Responding results for grade 8 students for selected demographic subgroups. The subgroups, defined by region, gender, race, type of school, and parental education, are among those traditionally reported on by NAEP.[1] The results from the NAEP 1997 arts assessment are consistent with NAEP results in other subjects, showing variability in average performance across many of those subgroups.

In this chapter, subgroup results are presented for music, theatre, and visual arts. However, the reader is reminded that, unlike music and visual arts, theatre results are not for a random national sample. As previously explained, the theatre sample was composed of students who had accumulated 30 class hours of theatre classes by the end of the 1996-97 school year, at schools offering at least 44 classroom hours of a theatre course per semester. The reader should keep this in mind when making comparisons between the theatre demographic results and the music and visual arts results presented in this chapter. To underscore the differences in samples, theatre results are presented after music and visual arts results.

Additionally, readers should avoid comparing scores across arts areas. The assessment exercises in each area were independently developed. No explicit efforts were undertaken to match the difficulty level or scope of coverage of the assessments across the different arts areas. Furthermore, the IRT-based Responding scales in each subject are indepen-

Table 6.1 **Average Music Scores by Region**

Region	Average Creating Score (0-100%)	Average Performing Score (0-100%)	Average Responding Scale Score (0-300)
Nation	34	34	150
Northeast	39	34	153
Southeast	30	33	139
Central	36	33	157
West	33	35	152



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

THE NATION'S REPORT CARD NAEP

1 NAEP has recently begun including participation in Title I and the Free and Reduced-Priced Lunch programs as traditional reporting variables. However, in the arts assessment Title I and Free and Reduced-Priced Lunch data were gathered at the school level, but not at the student level, and hence are not included here.

dently derived, and the same score in two subjects may not represent the same level of student achievement. Consequently, comparisons of average scores across content areas are not inherently meaningful.

Finally, readers should note that unlike Responding results, Creating and Performing results are not summarized using a standard NAEP scale. Instead, Creating and Performing results are presented as average percents of the maximum possible score on exercises, in relation to demographic variables. (Percentages of students in the various subgroups discussed in this chapter may be found in Appendix A of this report.)

Region

For reporting purposes, the nation was divided into four regions: West, Northeast, Southeast, and Central. Each state, and the District of Columbia, was assigned to a region. (Appendix A provides a description of each region.) Across the various subjects (reading, science, writing, history, geography, and others) assessed by NAEP, regional differences in performance typically have been found. In the arts, however, significant regional differences in performance were found only in music Responding.

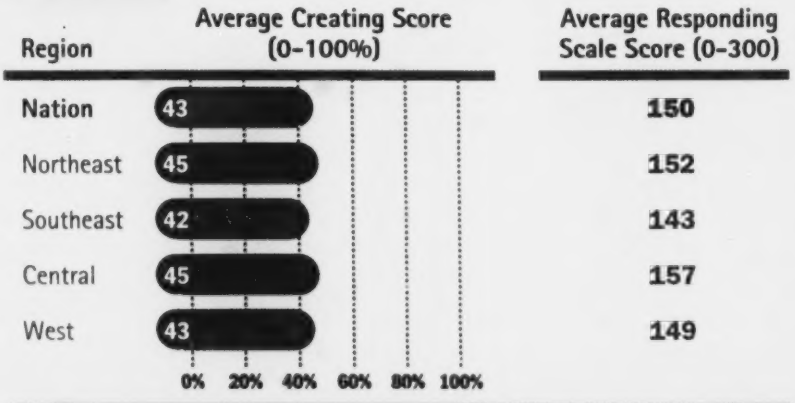
Tables 6.1 to 6.3 present regional results for the arts assessment. In music (Table 6.1) there were no significant regional differences in average Creating and Performing scores. This may in some cases be due to the relatively small sample sizes of students that took blocks that included Creating and/or Performing tasks.

For music Responding (Table 6.1), students in both the Central and West regions outperformed students in the Southeast. The apparent difference between students' scores in the Northeast and students in the Southeast, though consistent with NAEP results in other subject areas, is not statistically significant.

Table 6.2 presents average visual arts scores for Creating and Responding according to region. Again, while there are apparent differences in visual arts average Responding scale scores across regions, none of these differences is significant.

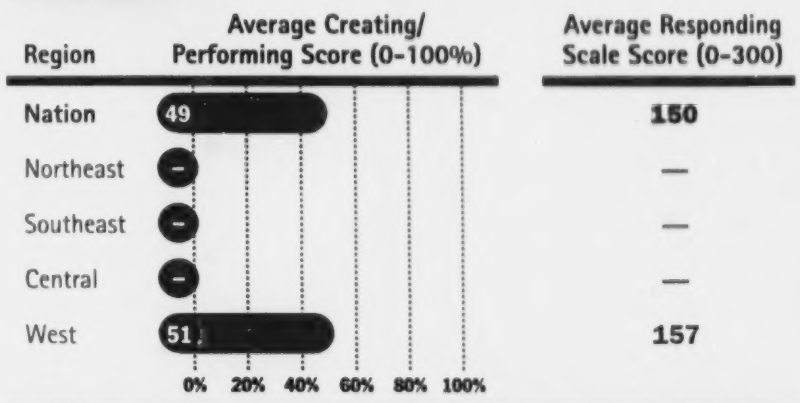
In theatre, as shown in Table 6.3, sample sizes except in the West were too small to measure results, so no performance comparisons can be made. (This can be explained by the special nature of the theatre sample. The great majority of schools featuring theatre as part of their curricula were located in the West.)

Table 6.2 **Average Visual Arts Scores by Region**



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

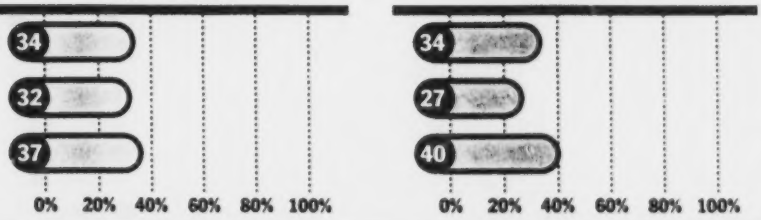
Table 6.3 **Average Theatre Scores by Region**



NOTE: – Sample size is insufficient to permit a reliable estimate.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 6.4 Average Music Scores by Gender

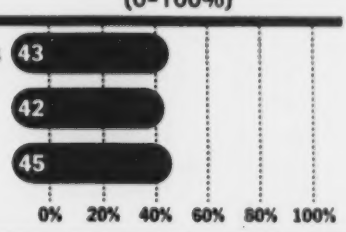
Gender	Average Creating Score (0–100%)	Average Performing Score (0–100%)	Average Responding Scale Score (0–300)
All Students	34	34	150
Male	32	27	140
Female	37	40	160



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 6.5 Average Visual Arts Scores by Gender

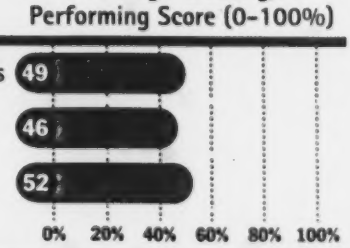
Gender	Average Creating Score (0–100%)	Average Responding Scale Score (0–300)
All Students	43	150
Male	42	146
Female	45	154



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 6.6 Average Theatre Scores by Gender

Gender	Average Creating/ Performing Score (0–100%)	Average Responding Scale Score (0–300)
All Students	49	150
Male	46	140
Female	52	158



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

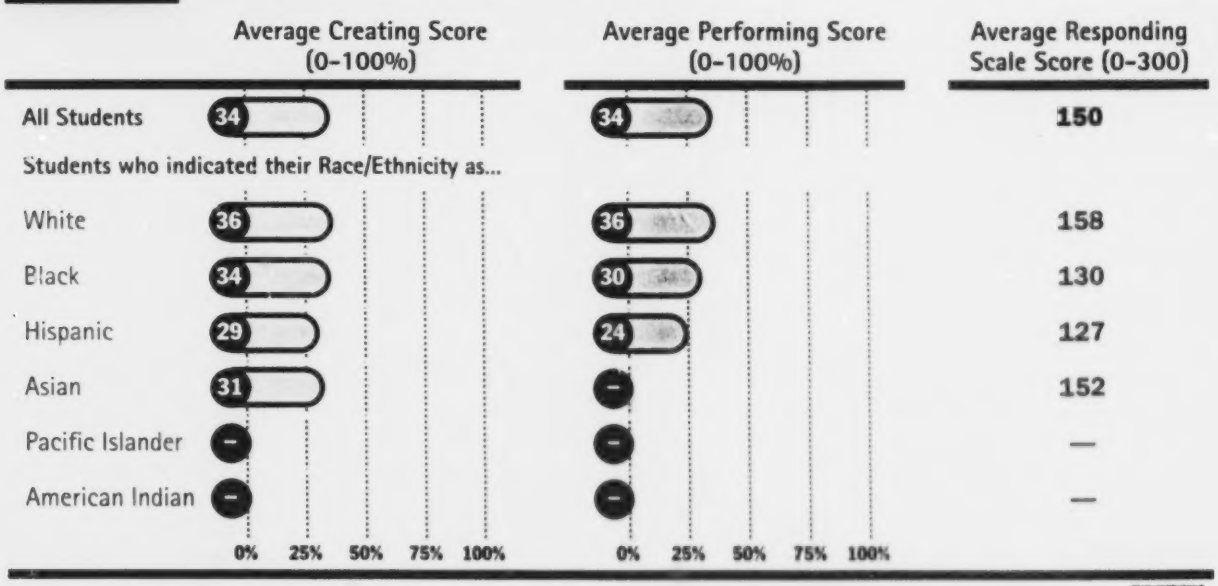
Gender

Tables 6.4 to 6.6 present the NAEP 1997 arts results for males and females at grade 8. Various NAEP assessments have captured performance differences between males and females. While females have outperformed males in reading and writing, males have outperformed females in geography and, at grade 8, in science. In the arts assessment, females often had higher average scores than did males.

Table 6.4 shows results for music. Females outperformed males in music Creating, Performing, and Responding. Females also outperformed males in Creating and Responding in visual arts, as shown in Table 6.5.

In the theatre assessment (Table 6.6) females outperformed males in both Creating/Performing and in Responding.

Table 6.7 Average Music Scores by Race/Ethnicity



NOTE: — Sample size is insufficient to permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Race/Ethnicity

Tables 6.7 to 6.9 present arts assessment results for the following mutually exclusive categories: White, Black, Hispanic, Asian, Pacific Islander, and American Indian.[2] NAEP creates these subgroups based on students' reports of their race/ethnicity. Past NAEP assessments have consistently reported performance differences among various racial/ethnic groups.[3] This pattern of results is also found in the arts, most noticeably in the Responding results across subjects. When interpreting such differences in performance, however, confounding factors related to socioeconomics, home environment, and available educational opportunities need to be considered.[4]

Table 6.7 shows results for music. Consistent with NAEP assessments in other subjects, White students had higher average music scores than did Hispanic students for Creating, Performing, and Responding, and higher average scores in Responding and Performing, but not Creating, than did Black students. Asian students had higher average music Responding scores than did Black and Hispanic students. In music, it was not possible to make an accurate determination of the average scores for Pacific Islander and American Indian students. Therefore, differences among these groups or in relation to other groups are not discussed for music.

2 The percentages and scores reported for American Indians include Alaskan Natives.

3 Campbell, J.R., Voelkl, K.E., and Donahue, P.L. (1997). *NAEP 1996 trends in academic progress: Achievement of U.S. students in science, 1969 to 1996; mathematics, 1973 to 1996; reading, 1971 to 1996; and writing, 1984 to 1996.* (Publication No. NCES 97-985). Washington DC: National Center for Education Statistics.

4 Cole, Nancy S. (1997). *Merit and opportunity: Testing and higher education at the vortex.* Paper presented at the national conference, New Directions in Assessment for Higher Education: Fairness, Access, Multiculturalism and Equity, New Orleans, LA.

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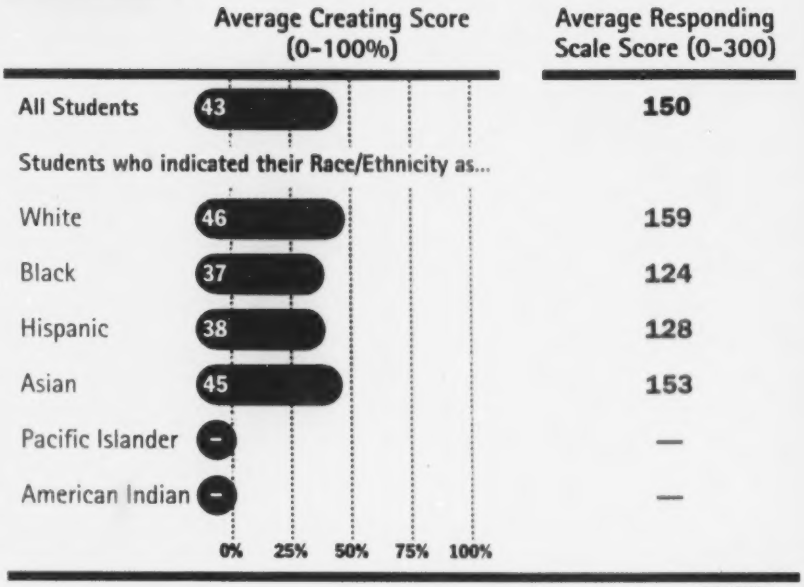
The pattern is similar in visual arts (Table 6.8). White students had higher average scores than did Black or Hispanic students for both Creating and Responding. Additionally, Asian students had higher average scores than did Black or Hispanic students for Creating and Responding. In visual arts, it was not possible to make an accurate ... determination of the average scores for Pacific Islander and American Indian students. Therefore, differences among these groups or in relation to other groups are not discussed for visual arts.

In theatre, White students had higher average scores than did Black or Hispanic students for Creating/Performing and Responding (Table 6.9). Given theatre sample sizes, it was not possible to make an accurate determination of the average scores for Asian, Pacific Islander, or American Indian students. Therefore, differences among these groups or in relation to other groups are not discussed for theatre.

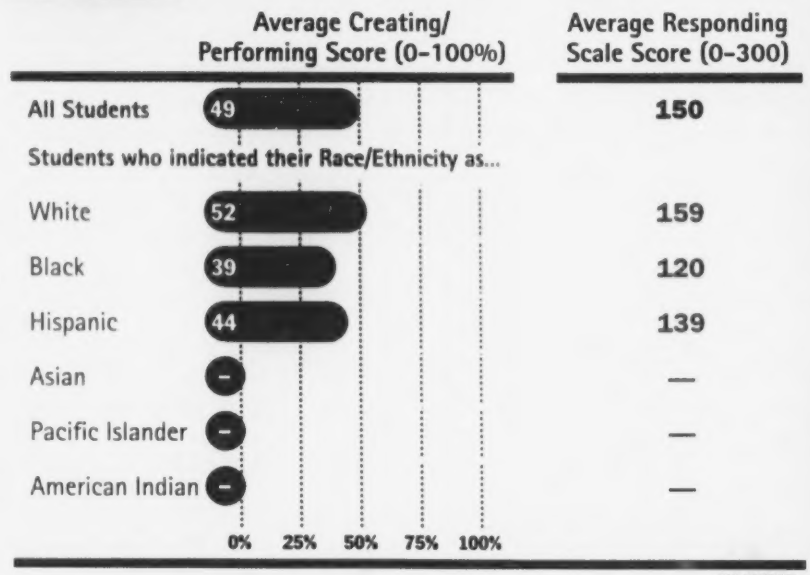
Readers are cautioned against making simplistic inferences about differences in performance among different groups of students. As noted earlier, average performance differences may be partly related to socioeconomic or sociological factors, such as parental education or parental involvement. More in-depth investigations would be required to produce a clearer picture of performance differences by race/ethnicity .

Table 6.8 **Average Visual Arts Scores by Race/Ethnicity**



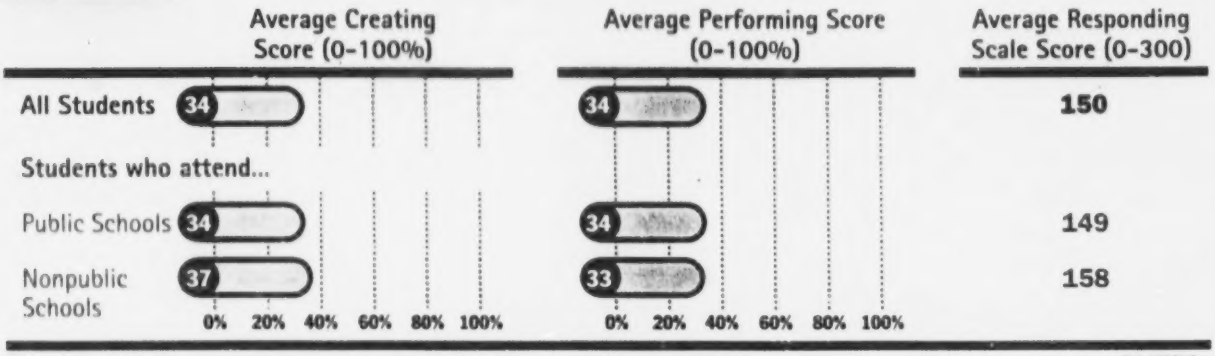
NOTE: – Sample size is insufficient to permit a reliable estimate.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 6.9 **Average Theatre Scores by Race/Ethnicity**



NOTE: – Sample size is insufficient to permit a reliable estimate.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment

Table 6.10 Average Music Scores by Type of School Attended



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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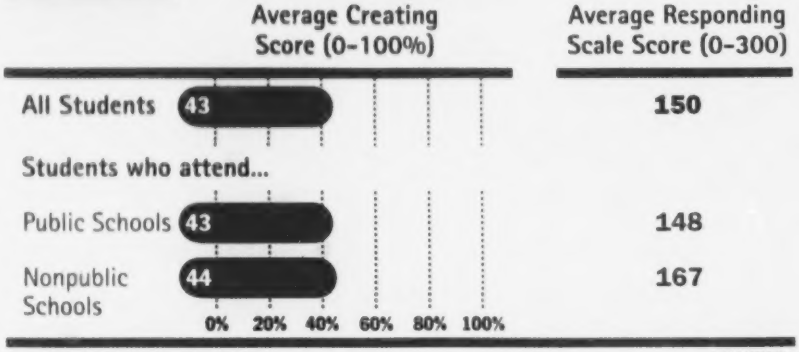
Type of School

Approximately 90 percent of the nation's grade 8 students attend public schools. The remainder attend Catholic and other private schools (i.e., nonpublic schools). Past NAEP results across a variety of subjects have consistently shown students attending nonpublic schools outperforming students attending public schools. Tables 6.10 to 6.12 present results by type of school for the arts assessment.

Table 6.10 shows results for music. There were no significant differences between students attending public and nonpublic schools for music Creating, Performing, or Responding. In visual arts (Table 6.11), students attending nonpublic schools did outperform those attending public school for Responding, but not for Creating.

Table 6.11 Average Visual Arts Scores by Type of School Attended



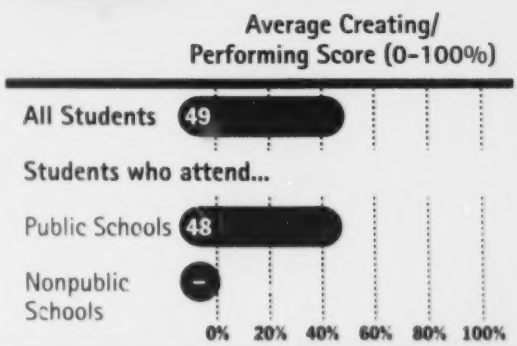
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

THE NATION'S REPORT CARD naep

For theatre, as Table 6.12 indicates, sample sizes of students studying theatre and attending nonpublic schools were too small to allow for comparisons of average performance.

Caution should be taken not to make simplistic inferences about the relative effectiveness of public and nonpublic schools. Average performance differences between the two types of schools may be partly related to socioeconomic or sociological factors, such as parental education or parental involvement. More in-depth investigations would be required to get a clearer picture of school differences.

Table 6.12 **Average Theatre Scores by Type of School Attended**



NOTE: – Sample size is insufficient to permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Parental Education

Each student who participated in the NAEP arts assessment was asked to indicate the level of education attained by each parent. Based on this information, parents' highest level of education (as reported by students) was determined. Specifically, this reflects the highest educational level the student reported for either parent. Therefore, if a student reported that one parent graduated from college, that student's performance is included in the graduated from college score estimates. The levels of parental education reported are as follows: did not finish high school, graduated from high school, some education after high school, and graduated from college.

In general, consistent with other NAEP assessments, higher levels of parental education were associated with higher levels of student performance (see Tables 6.13 to 6.15 on pages 141-142). This pattern of results is found in the music and visual arts Responding results. It is also evident, to varying degrees, in the theatre Responding results and in the Creating and Performing results across the arts areas.

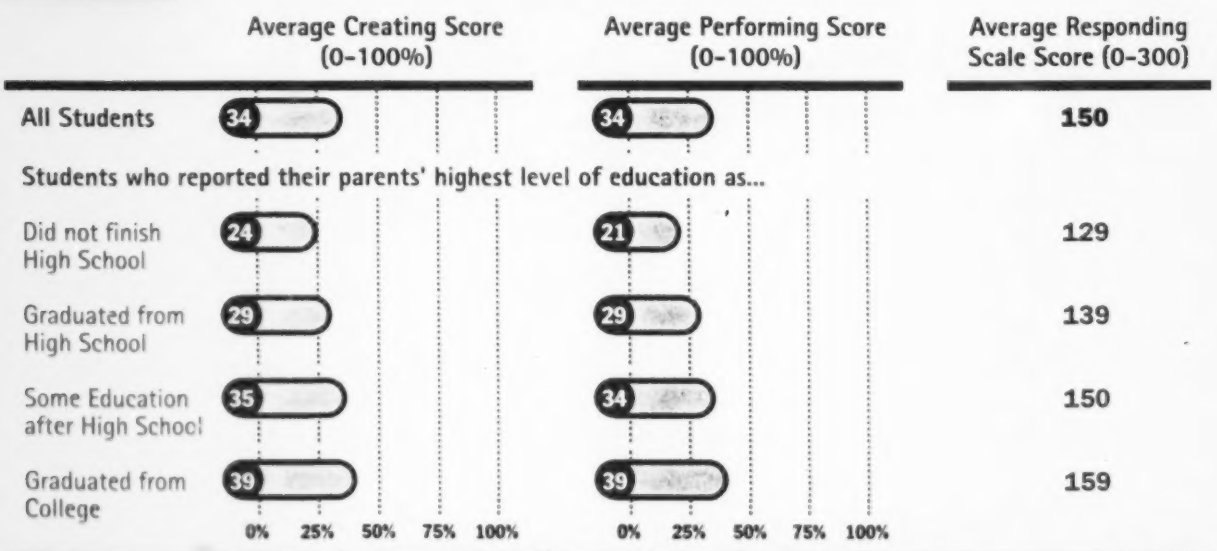
In music Creating and Performing (Table 6.13), students whose parents had graduated from college outperformed those students whose parents did not finish high school and those whose parents had graduated from high school. The remaining apparent differences between Creating and Performing scores of students whose parents had graduated from college and those students whose parents had some education after high school were not statistically significant.

Students whose parents had some education after high school had higher music average Creating and Performing scores than did their peers whose parents had not finished high school, and higher Creating scores than those students whose parents had graduated from high school. The apparent differences between Performing scores for students whose parents had some education after high school and students whose parents had graduated from high school were not statistically significant.

Finally, students whose parents had graduated from high school had higher average music Performing scores than did students whose parents had not finished high school. Apparent differences between average music Creating scores for students whose parents had graduated from high school, and those whose parents had not finished high school were not statistically significant.

In music Responding (Table 6.13), students whose parents had gradu-

Table 6.13 Average Music Scores by Parents' Highest Education Level

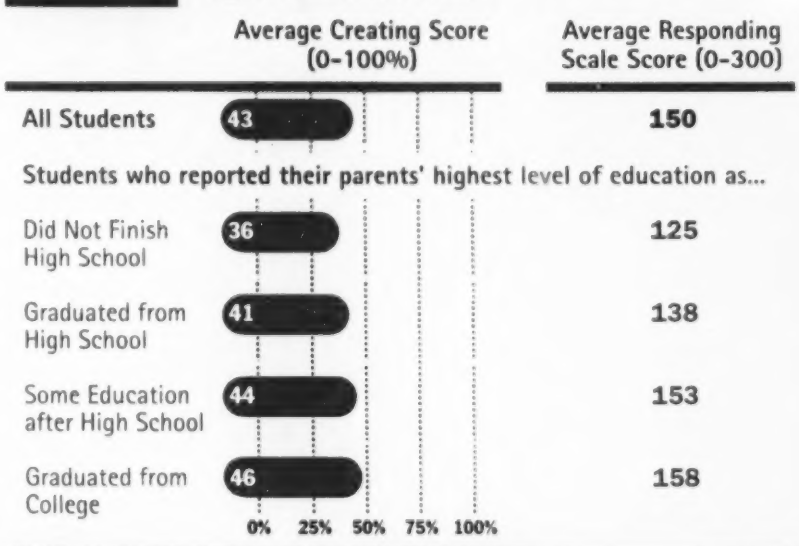


SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

ated from college outperformed all other groups of students. Students whose parents had some education after high school had higher average music Responding scale scores than did students whose parents had graduated from high school and students whose parents had not finished high school. Lastly, students whose parents had graduated from high school had higher average Responding scale scores than did their peers whose parents had not finished high school.

Visual arts results are shown in Table 6.14. For visual arts Creating, students whose parents had graduated from college outperformed those whose parents did not finish high school and students whose parents had graduated from high school. Students whose parents had some education after high school had higher average Creating scores than those whose parents did not

Table 6.14 Average Visual Arts Scores by Parents' Highest Education Level



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 6.15 **Average Theatre Scores by Parents' Highest Education Level**

	Average Creating/ Performing Score (0–100%)	Average Responding Scale Score (0–300)
All Students	49	150
Students who reported their parents' highest level of education as...		
Did Not Finish High School	42	131
Graduated from High School	42	130
Some Education after High School	49	153
Graduated from College	52	157

0% 25% 50% 75% 100%

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

finish high school or had graduated from high school. Finally, students whose parents had graduated from high school outperformed their peers whose parents did not finish high school.

Students whose parents had graduated from college had higher average visual arts Responding scale scores than did the other three groups of students (Table 6.14). Students whose parents had some education after high school had higher average scale scores than did students whose parents had not finished high school and students whose parents had graduated from high school. Lastly, students whose parents had graduated from high school outperformed their peers whose parents had not finished high school.

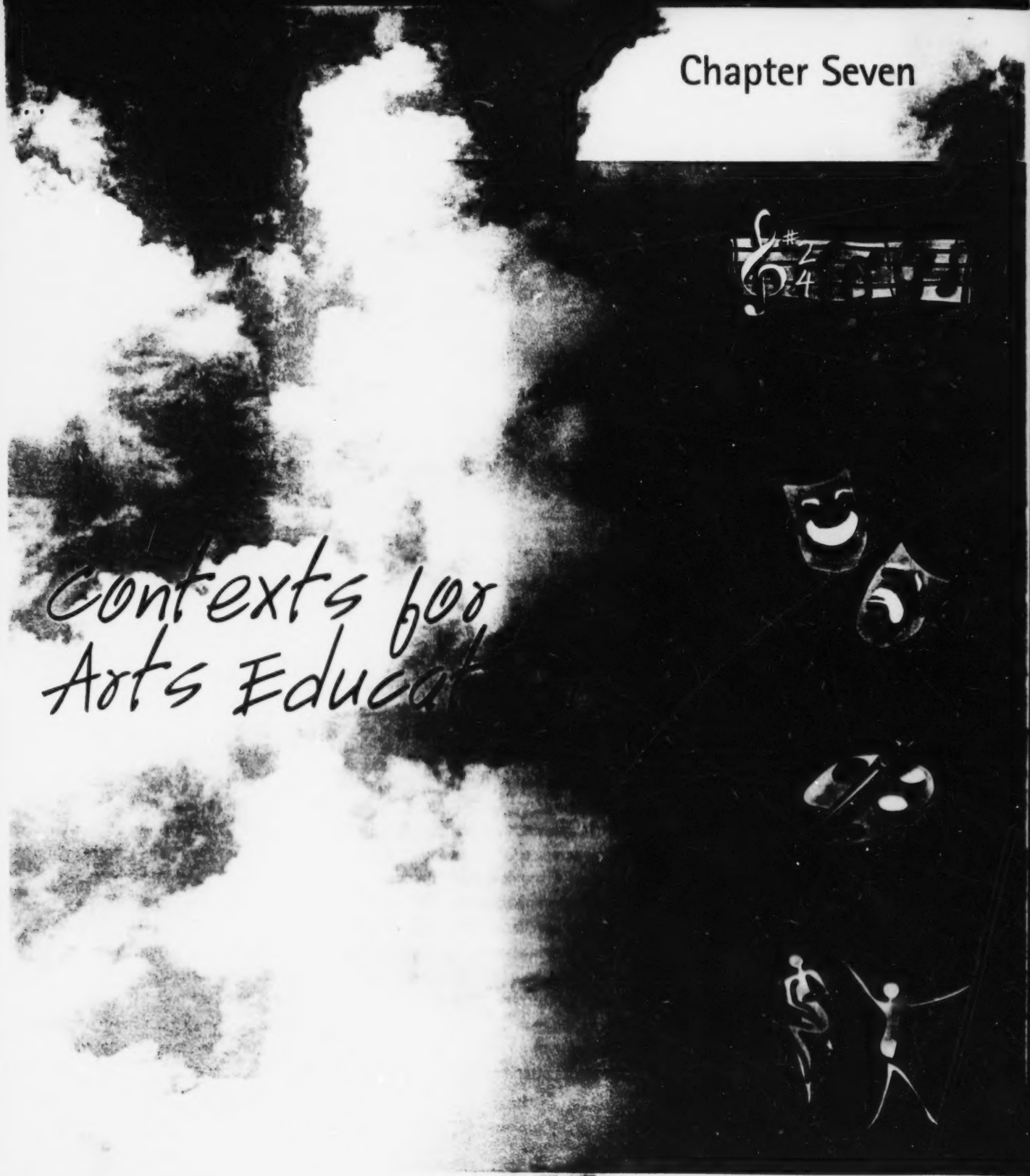
For theatre Creating/Performing (Table 6.15), students whose parents had graduated from college outperformed students whose parents had not finished high school and students whose parents had graduated from high school. Students whose parents had some education after high school had higher average scores than those whose parents had not finished high school or had graduated from high school. Further, students whose parents had graduated from college or had some education after high school had higher average Responding scale scores than did students whose parents had not finished high school.

Summary

The preceding sections provided a detailed picture of arts achievement for students in various subgroups defined by region, gender, race/ethnicity, type of school, and parental education. Although results varied (and some could not be reported because of sample sizes) the following patterns emerged for gender, race/ethnicity, and parental education.

- Females consistently outperformed their male peers in the NAEP 1997 Arts Assessment.
- Consistent with past NAEP assessments, White and (where sample sizes were large enough) Asian students had higher average scores in some instances than did Black or Hispanic students. Exceptions were the absence of significant differences between White and Black students for music Creating, and the absence of significant differences between Black, Hispanic, and Asian students for music Creating and Performing.
- Also consistent with past NAEP assessments, in general, higher levels of parental education were associated with higher levels of student performance for music and visual arts. This was also true for theatre.

Chapter Seven



Contexts for Arts Educat

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Chapter Seven

Contexts for Arts Education

Introduction

Given the increasing focus on the value of arts learning, it is useful to have an understanding of the contexts in which that learning takes place. The 1995 National Center for Education Statistics report, *Arts Education in Public Elementary and Secondary Schools*, reported on school resources for arts education. According to that report, the frequency of arts instruction, the positions of those who teach the arts, and the nature of facilities for arts teaching are all important factors in determining the quality of an arts education.[1] Part 1 of this chapter presents data on school resources collected from the nation's schools that participated in the NAEP 1997 arts assessment.

It is specified on the NAEP school questionnaires that they should be filled in by a principal or other head administrator. However, information is sometimes provided by other school staff. In the arts, 74 percent of those who filled in the questionnaire or provided information were school principals. Twenty-seven percent were counselors, and 19 percent were assistant or vice principals. Smaller percentages of other staff (for example, teachers) provided information.

In Part 1 of this chapter, wherever possible, school-reported data for dance, music, theatre, and visual arts are placed side by side in the same tables to facilitate comparisons. So that comparisons among these data are made based on the same student samples, the dance and theatre percentages in Part 1 are based on school-reported data for students that were part of the visual arts sample.

(As previously explained, the student samples for music and visual arts were standard NAEP random national samples. By contrast, the theatre sample was a "targeted" sample. Schools offering at least 44 classroom hours of a theatre course per semester, and offering courses including more than the history or literature of theatre, were identified. Students attending these schools who had accumulated 30 hours of theatre classes by the end of the 196-97 school year were selected to take the theatre assessment. Theatre percentages in Part 1 are based on the visual arts sample because the visual arts sample included a larger number of students in a wider range of schools than the music sample. There was no dance sample.)

While comparisons can be made among school-reported data in the different arts areas, readers are again cautioned against making direct comparisons among scores across subjects. Readers should also note that average scores are featured only for music and visual arts in Part 1 of this chapter. NAEP did not administer a dance assessment, and theatre scores do not match the school-reported data featured in Part 1.

Part 2 of this chapter focuses on data collected from the schools and teachers of those students who took the theatre assessment. This means that the school- and teacher-reported data featured in Part 2 are based on responses from schools where

1 National Center for Education Statistics. (1995). *Arts education in public elementary and secondary schools.* (Publication No. NCES 95-082). Washington, DC: U.S. Department of Education, 1. (See also http://nces.ed.gov/surveys/frss.html)

theatre is a meaningful part of the curriculum. Students' theatre scores are presented in this section of chapter 7.

Theatre was the only subject assessed in the arts to include a teacher questionnaire because of the unusual nature of the theatre student sample. Previous NAEP studies have shown that it is difficult to get teacher responses to questionnaires for subjects that may be taught by itinerant teachers or part-time staff.[2] Hence, a teacher questionnaire was only given to teachers at schools with a substantial theatre curriculum, under the assumption that teachers at those schools would likely be full-time or permanent staff members.

Readers should be aware that the relationships among school and (theatre) teacher variables and student performance are complex. Prior NAEP assessments have often failed to demonstrate simple relationships between many school and teacher variables and student performance. However, the absence of relationships between variables and student performance should not necessarily be interpreted to mean that there are no cause-and-effect relationships between them. Such effects may be masked by other factors. By the same token, when there are statistical relationships, readers are cautioned against assigning cause and effect to a single variable.

Part One

Schools and Arts Learning

Frequency of Arts Instruction

Table 7.1 presents results on the frequency of arts instruction for grade 8 students. As has been noted elsewhere in this report, most schools do not have comprehensive programs in dance or theatre.[3] Three percent of students attended schools that reported teaching dance to the typical eighth-grader three or four times a week, and 10 percent attended schools that reported teaching theatre to the typical eighth-grader three or four times a week. By contrast, 43 percent of students attended schools where music was taught to the typical eighth-grader at least three or four times a week, and 52 percent of students attended schools where visual arts were taught to the typical eighth-grader at least three or four times a week. While approximately one quarter of students attended schools where music and visual arts were taught once or twice a week to the typical eighth-grader, 4 percent of students attended schools where dance was taught once or twice a week to these students. Seven percent of students attended schools where theatre was taught once or twice a week to the typical eighth-grader.

There were no consistent patterns of significant relationships between frequencies of instruction and student scores.

2 Large percentages (between 30 and 70 percent) of data were missing from the 1995 arts field test teacher questionnaires in music and visual arts.

3 Eleven percent of schools in the NAEP random national sample offered some kind of theatre coursework, and 23 percent of students in that sample had some exposure to theatre education.

Table 7.1 Schools' Reports on the Frequency With Which Their Students Receive Instruction in the Arts

How often does a typical eighth-grade student in your school receive instruction in each of the following subjects?		% Students	Responding Scale Score (0-300)	Average Creating Score (0-100%)	Average Performing Score (0-100%)
Dance	At Least 3 or 4 Times a Week	3			
	Once or Twice a Week	4			
	Less than Once a Week	13			
	Subject not Taught	80			
Music	At Least 3 or 4 Times a Week	43	151	33	34
	Once or Twice a Week	38	154	35	33
	Less than Once a Week	10	146	34	37
	Subject not Taught	9	139	41	—
Theatre	At Least 3 or 4 Times a Week	10			
	Once or Twice a Week	7			
	Less than Once a Week	8			
	Subject not Taught	74			
Visual Arts	At Least 3 or 4 Times a Week	52	147	45	
	Once or Twice a Week	25	155	44	
	Less than Once a Week	5	137	35	
	Subject not Taught	17	150	42	

0% 20% 40% 60% 80% 100%

NOTES: Percentages do not sum to 100 due to rounding.

Data reported in this table for Dance, Theatre, and Visual Arts are taken from the Visual Arts sample. Music data are taken from the Music sample.

— Sample size is insufficient to provide a reliable estimate.

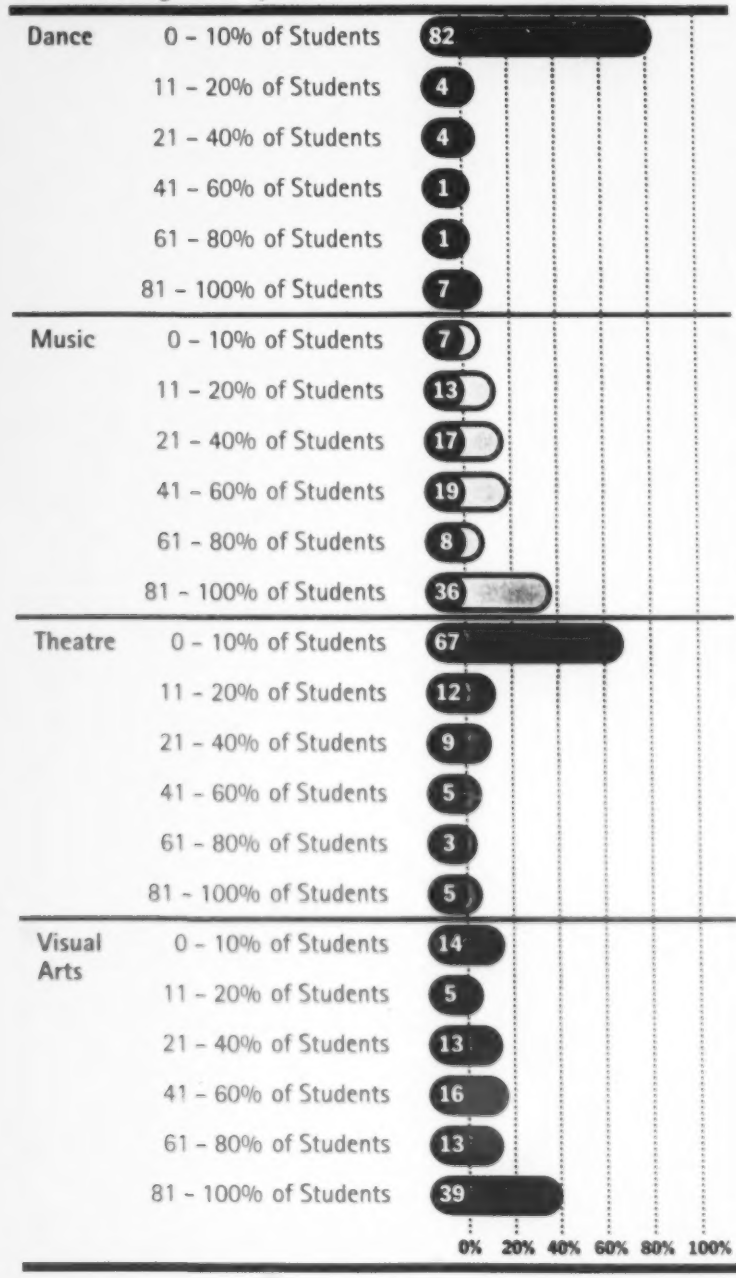
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Percentages of Students Receiving Arts Instruction

Table 7.2 shows percentages of students receiving arts instruction in the schools. A large percentage of grade 8 students attended schools in which music and visual arts are taught, but student access to theatre and dance instruction is limited. Thirty-six percent of students attended schools where 81 to 100 percent of the students received music instruction, and 39 percent attended schools where 81 to 100 percent of the students received visual arts instruction. By contrast, 7 percent of students attended schools where 81 to 100 percent of the students received dance instruction, and 5 percent of students attended schools where 81 to 100 percent of students received theatre instruction.

There were no consistent patterns of significant relationships between scores and percentages of students receiving instruction in the arts areas.

Table 7.2 Schools' Reports on Various Percentages of Students Receiving Arts Instruction


During this year, what percentage of eighth graders received instruction in the following arts in your school?
% Students
0% 20% 40% 60% 80% 100%

			Responding Scale Score (0–300)	Average Creating Score (0–100%)	Average Performing Score (0–100%)
Dance	0 – 10% of Students	82			
	11 – 20% of Students	4			
	21 – 40% of Students	4			
	41 – 60% of Students	1			
	61 – 80% of Students	1			
	81 – 100% of Students	7			
Music	0 – 10% of Students	7	131	35	—
	11 – 20% of Students	13	144	35	32
	21 – 40% of Students	17	147	32	34
	41 – 60% of Students	19	158	38	37
	61 – 80% of Students	8	151	28	36
	81 – 100% of Students	36	155	35	32
Theatre	0 – 10% of Students	67			
	11 – 20% of Students	12			
	21 – 40% of Students	9			
	41 – 60% of Students	5			
	61 – 80% of Students	3			
	81 – 100% of Students	5			
Visual Arts	0 – 10% of Students	14	149	40	
	11 – 20% of Students	5	142	39	
	21 – 40% of Students	13	147	42	
	41 – 60% of Students	16	151	45	
	61 – 80% of Students	13	147	44	
	81 – 100% of Students	39	153	45	

NOTES: Percentages do not sum to 100 due to rounding.

Data reported in this table for Dance, Theatre, and Visual Arts are taken from the Visual Arts sample. Music data are taken from the Music sample.

– Sample size is insufficient to provide a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Arts Curricula

In light of increasing interest in standards for arts learning, it is helpful to see what percentages of schools follow a curriculum for arts education. Table 7.3 indicates that most students attended schools in which instruction following district or state curricula was offered in music and visual arts, but not in theatre or dance. Seventy-two percent of students attended schools that followed a district or state curriculum in music, and 64 percent attended schools that followed a district or state curriculum for visual arts. On the other hand, 10 percent of students attended schools that followed such a curriculum for dance, and 15 percent attended schools that followed a district or state theatre curriculum. There were no significant relationships between scores and percentages of students attending schools that followed district or state arts curricula.

Table 7.3 **Schools' Reports on District or State Arts Curriculum Requirement**

Does your district or state have a curriculum in any of the following subject areas that your school is expected to follow?		% Students	Responding Scale Score (0-300)	Average Creating Score (0-100%)	Average Performing Score (0-100%)
Dance	Yes	10			
	No*	90			
Music	Yes	72	151	34	34
	No*	28	152	35	35
Theatre	Yes	15			
	No*	85			
Visual Arts	Yes	64	148	44	
	No*	36	153	43	

0% 20% 40% 60% 80% 100%

NOTES: Percentages do not sum to 100 due to rounding.

Data reported in this table for Dance, Theatre, and Visual Arts are taken from the Visual Arts sample. Music data are taken from the Music sample.

* Percentages and scores in this row are representative of that portion of the sample that did not respond "Yes." For this series of background questions respondents were to indicate only those statements that were applicable.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Visiting Artists

Another important indicator of the commitment of schools to arts education is whether those schools bring in visiting artists, and especially whether they sponsor visiting artist programs. While some schools organize occasional events involving a visiting artist, a deeper commitment is evidenced by sponsorship of an ongoing program. Such programs can offer a means of exposing both teachers and students to people who create art as their primary professional activity.[4] Larger percentages of students attended schools that brought in visiting artists than attended schools that sponsored visiting artist programs (Tables 7.4 and 7.5).

Table 7.4 shows that of the four arts, the largest percentage of students (52 percent) attended schools that brought in visiting artists in music to perform, demonstrate, or teach music. For dance, theatre, and

Table 7.4 **Schools' Reports on Whether They Use Visiting Artists**

In the last year, did your school bring in visiting artists to perform, demonstrate, or teach in any of the following areas?		% Students	Responding Scale Score (0-300)	Average Creating Score (0-100%)	Average Performing Score (0-100%)
Dance	Yes	33			
	No*	67			
Music	Yes	52	151	32	34
	No*	48	151	37	34
Theatre	Yes	38			
	No*	62			
Visual Arts	Yes	33	151	44	
	No*	67	149	43	

0% 20% 40% 60% 80% 100%

NOTES: Data reported in this table for Dance, Theatre, and Visual Arts are taken from the Visual Arts sample. Music data are taken from the Music sample.

* Percentages and scores in this row are representative of that portion of the sample that did not respond "Yes." For this series of background questions respondents were to indicate only those statements that were applicable.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

4 National Center for Education Statistics. (1995). *Arts education in public elementary and secondary schools.* (Publication No. NCES 95-082). Washington, DC: U.S. Department of Education, 20. (See also http://nces.ed.gov/surveys/frss.html)

visual arts, about one third of students attended schools that brought in visiting artists. There were no consistent patterns of significant relationships between scores and percentages of students attending schools that brought in visiting artists.

According to Table 7.5, most students attended schools that did not sponsor visiting artist programs in music, dance, theatre, or visual arts. Twenty percent or less of students attended schools that sponsored a visiting artist program. There were no significant relationships between students' scores and percentages of students attending schools sponsoring visiting artist programs.

Table 7.5 Schools' Reports on Whether They Sponsor an Artist-in-the-Schools Programs

In the last year, did your school sponsor a visiting artist program (such as an Artist-in-the-Schools program) in any of the following areas?		% Students	Responding Scale Score (0-300)	Average Creating Score (0-100%)	Average Performing Score (0-100%)
Dance	Yes	10			
	No*	90			
Music	Yes	17	151	33	34
	No*	83	151	35	34
Theatre	Yes	12			
	No*	88			
Visual Arts	Yes	20	151	44	
	No*	80	149	44	

0% 20% 40% 60% 80% 100%

NOTES: Data reported in this table for Dance, Theatre, and Visual Arts are taken from the Visual Arts sample. Music data are taken from the Music sample.

* Percentages and scores in this row are representative of that portion of the sample that did not respond "Yes." For this series of background questions respondents were to indicate only those statements that were applicable.

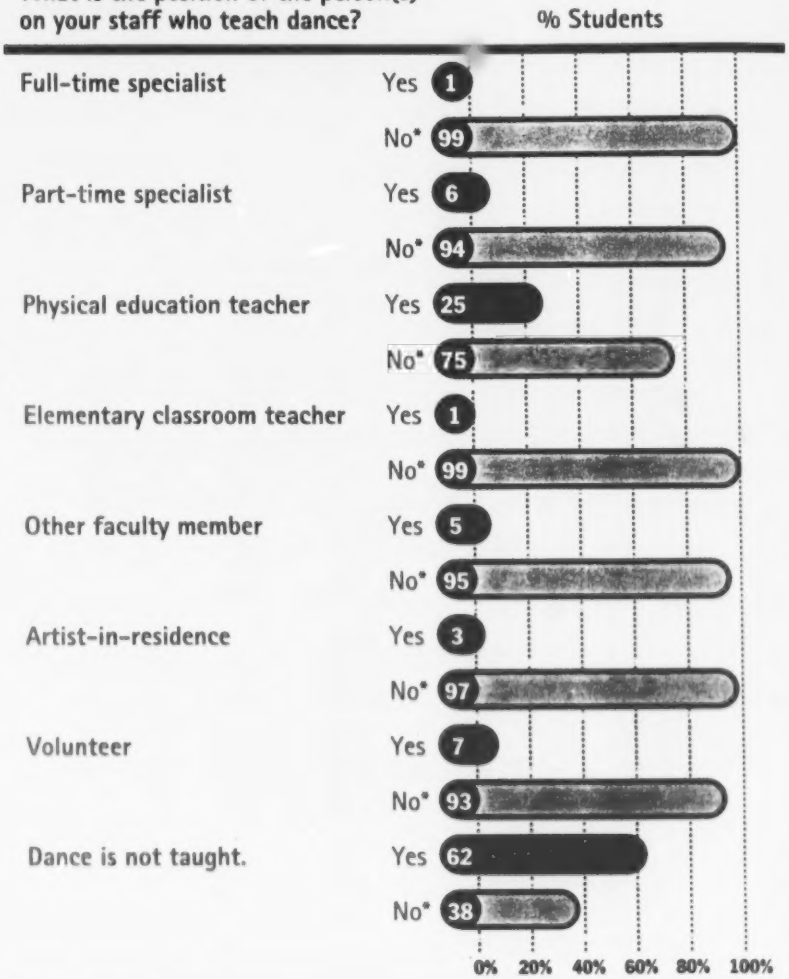
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Positions of Those Teaching the Arts

Tables 7.6 to 7.9 present data on the positions of those teaching the arts in the nation's schools. More students attended schools where music and visual arts were taught by full-time specialists than attended schools where dance and theatre were taught by full-time specialists. Seventy-five percent of students attended schools that relied on full-time staff to teach music, and 73 percent attended schools that relied on full-time staff to teach visual arts (Tables 7.7 and 7.9). By contrast, 1 percent of students attended schools that relied on full-time specialists to teach dance, and 16 percent of students attended schools that relied on full-time specialists to teach theatre (Tables 7.6 and 7.8).

As shown in Table 7.6, 25 percent of students attended schools where dance was taught by physical education teachers. Sixty-two percent of students attended schools that reported not teaching dance.[5] Sixteen percent of students attended schools where theatre was taught by full-time specialists, and another 16 percent of students attended schools where theatre was taught by other faculty members

Table 7.6 **Schools' Reports on Who Teaches Eighth Graders in Dance**



NOTES: Data reported in this table for Dance are taken from the Visual Arts sample.

* Percentages in this row are representative of that portion of the sample that did not respond "Yes." For this series of background questions respondents were to indicate only those statements that were applicable.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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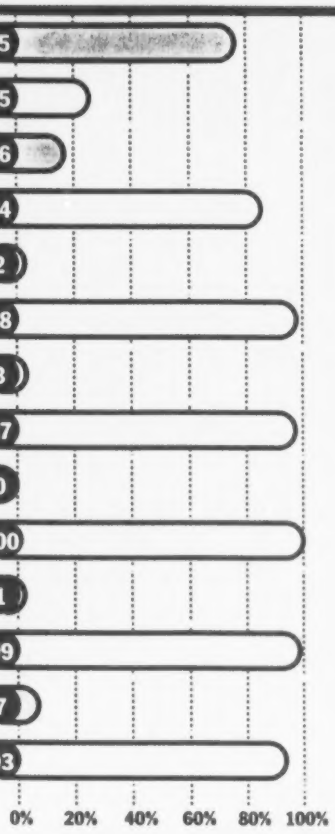
5 The response option "Subject not taught" appeared in various school background questions for the same arts subject. Schools did not respond consistently when confronted with this option; therefore, percentages of students attending schools where a given arts subject was not taught vary across tables. This may reflect the difficulty in collecting consistent responses to the same option when that option is offered in multiple contexts.

Table 7.7 Schools' Reports on Who Teaches Eighth Graders in Music

What is the position of the person(s) on your staff who teach music?		% Students	Responding Scale Score (0-300)	Average Creating Score (0-100%)	Average Performing Score (0-100%)
Full-time specialist	Yes	75	151	35	33
	No*	25	151	34	35
Part-time specialist	Yes	16	155	33	37
	No*	84	150	35	33
Elementary classroom teacher	Yes	2	—	—	—
	No*	98	151	34	34
Other faculty member	Yes	3	—	—	—
	No*	97	151	35	34
Artist-in-residence	Yes	0	—	—	—
	No*	100	151	34	34
Volunteer	Yes	1	—	—	—
	No*	99	151	34	34
Music is not taught.	Yes	7	132	—	—
	No*	93	152	34	34



NOTES: Data reported in this table for Music are taken from the Music sample.

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* Percentages and scores in this row are representative of that portion of the sample that did not respond "Yes." For this series of background questions respondents were to indicate only those statements that were applicable.

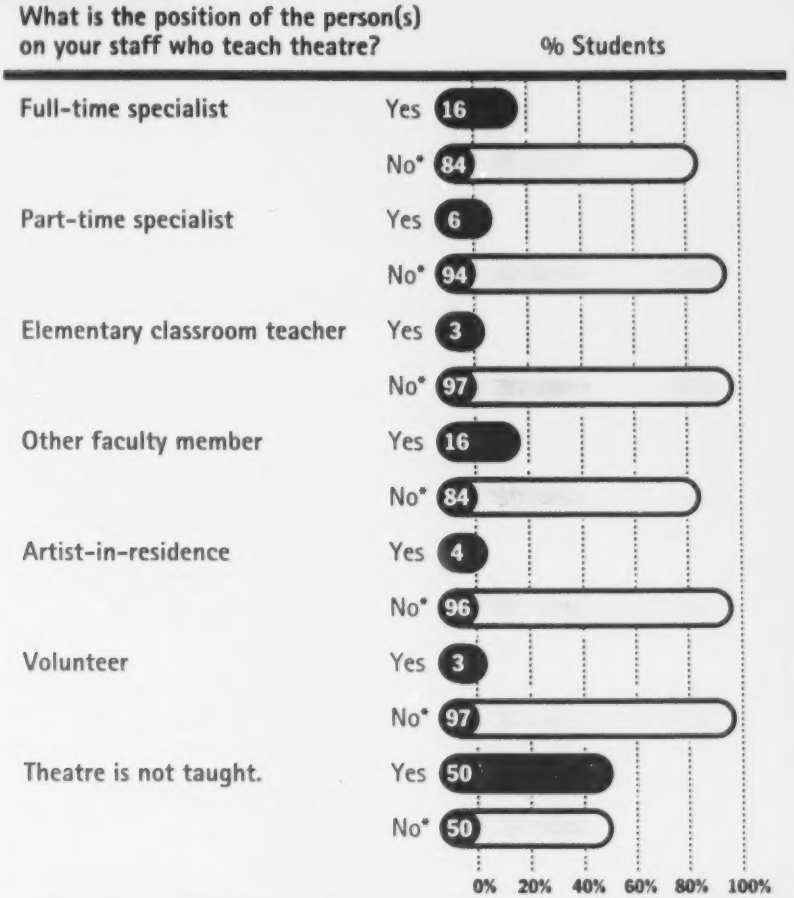
– Sample size is insufficient to provide a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

(that is, teachers who were not specialists or elementary classroom teachers). Fifty percent of students attended schools that reported not teaching theatre (Table 7.8).

There were no consistent patterns of significant relationships between student scores and the positions of those teaching the arts.

Table 7.8 **Schools' Reports on Who Teaches Eighth Graders in Theatre**



NOTES: Data reported in this table for Theatre are taken from the Visual Arts sample.

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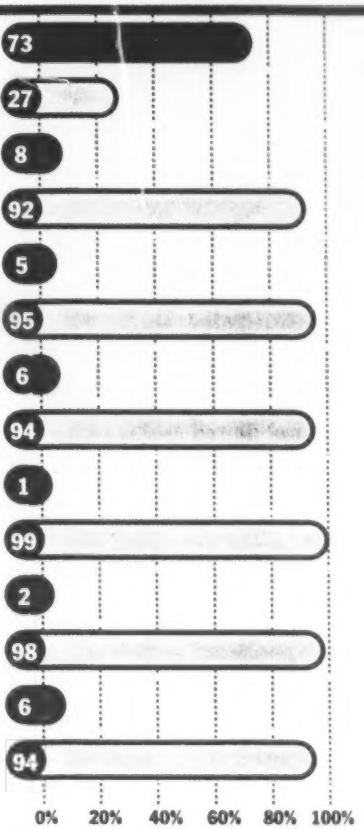
* Percentages in this row are representative of that portion of the sample that did not respond "Yes." For this series of background questions respondents were to indicate only those statements that were applicable.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 7.9 Schools' Reports on Who Teaches Eighth Graders in Visual Arts

What is the position of the person(s) on your staff who teach visual arts?		% Students	Responding Scale Score (0-300)	Average Creating Score (0-100%)
Full-time specialist	Yes	73	150	44
	No*	27	148	42
Part-time specialist	Yes	8	154	42
	No*	92	149	44
Elementary classroom teacher	Yes	5	151	39
	No*	95	150	44
Other faculty member	Yes	6	151	45
	No*	94	150	44
Artist-in-residence	Yes	1	—	—
	No*	99	150	44
Volunteer	Yes	2	—	—
	No*	98	150	44
Visual arts are not taught.	Yes	6	146	41
	No*	94	150	44



NOTES: Data reported in this table for Visual Arts are taken from the Visual Arts sample.

* Percentages and scores in this row are representative of that portion of the sample that did not respond "Yes." For this series of background questions respondents were to indicate only those statements that were applicable.

– Sample size is insufficient to provide a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Space for Arts Teaching

The spaces and facilities available in schools to teach the arts are also good indicators of the level of commitment to arts education. Tables 7.10 to 7.13 present information about the kinds of space resources available in the schools for the teaching of dance, music, theatre, and visual arts. As opposed to dance and theatre instruction, most music and visual arts instruction takes place in school facilities dedicated to those subjects.

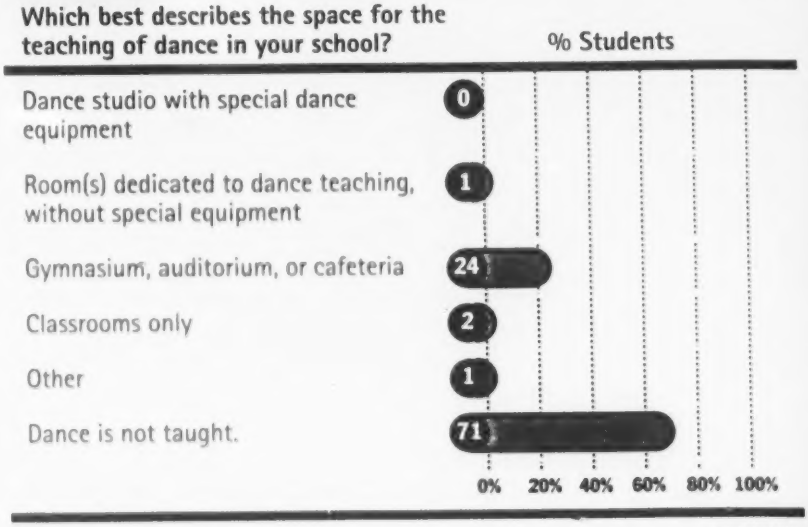
As shown in Table 7.11, 44 percent of students attended schools where music was taught in rooms dedicated to that subject, with a stage. Another 42 percent of students attended schools where music was taught in rooms dedicated to the subject, with no stage. Fifty-three percent of students attended schools where visual arts were taught in a studio with special equipment, while 35 percent attended schools where visual arts were taught in rooms dedicated to the subject but without special equipment (Table 7.13).

On the other hand (Table 7.10), no students attended schools with dance studio space with special dance equipment, and 1 percent of students attended schools with rooms dedicated to dance teaching without special equipment. Of those students who attended schools reporting teaching dance, the largest percentage (24 percent) were taught in a gymnasium, auditorium, or cafeteria.

Also in contrast to the results for music and visual arts, the results for theatre shown in Table 7.12 indicate that 16 percent of students attended schools where theatre was taught on a stage with special equipment. Seven percent attended schools where theatre was taught on stage without special equipment. Another 10 percent of students attended schools where theatre was taught in a gymnasium, auditorium, or cafeteria.

A number of significant relationships were observed between student scores and facilities for teaching. Students who attended schools where music was taught in a room dedicated to music teaching with a stage had higher average Creating and Performing scores than did their peers who attended schools where music was taught on a stage with no room dedicated to

Table 7.10 **Schools' Reports on the Space Where Dance is Taught**



NOTES: Percentages do not sum to 100 due to rounding.

Data reported in this table for Dance are taken from the Visual Arts sample.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

music teaching (Table 7.11). Further, students who attended schools where music was taught in rooms dedicated to music teaching without a stage had higher average Performing scores than did their peers who attended schools where music was taught on a stage with no room dedicated to music teaching.

For visual arts (Table 7.13), students who attended schools where visual arts were taught in art studios with special equipment, or in rooms dedicated to art but with no special equipment, had higher average Creating scores than did students who attended schools where visual arts was taught in classrooms only.

Table 7.11 **Schools' Reports on the Space Where Music is Taught**

Which best describes the space for the teaching and performing of music in your school?	% Students	Responding Scale Score (0–300)	Average Creating Score (0–100%)	Average Performing Score (0–100%)
Room(s) dedicated to music teaching, and stage	44	154	37	34
Room(s) dedicated to music teaching, no stage	42	150	34	35
Stage, no room dedicated to music teaching	3	139	21	23
Classrooms only	7	155	29	—
Other	2	—	—	—
Music is not taught.	2	—	—	—

0% 20% 40% 60% 80% 100%

NOTES: Data reported in this table for Music are taken from the Music sample.

— Sample size is insufficient to provide a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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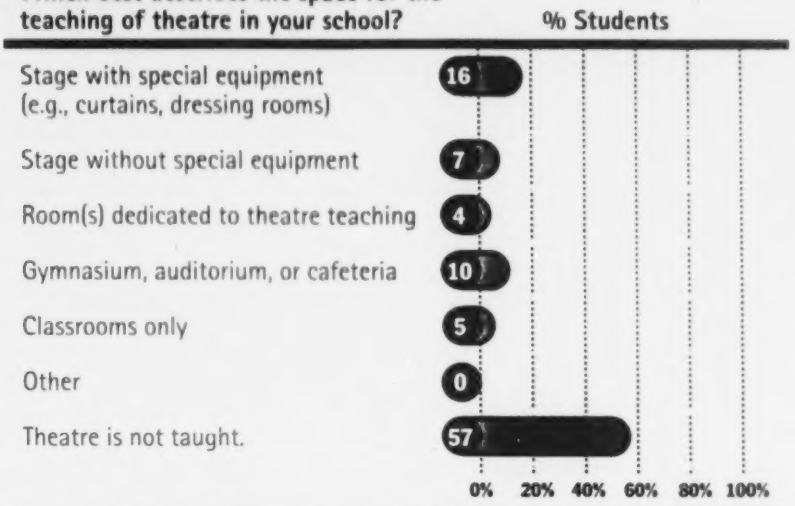
Table 7.12 Schools' Reports on the Space Where Theatre is Taught

Which best describes the space for the teaching of theatre in your school?



NOTES: Percentages do not sum to 100 due to rounding.

Data reported in this table for Theatre are taken from the Visual Arts sample.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 7.13 Schools' Reports on the Space Where Visual Arts is Taught

Which best describes the space for the teaching of visual arts in your school?	% Students	Responding Scale Score (0-300)	Average Creating Score (0-100%)
Art studio with special equipment	53	152	45
Room(s) dedicated to art but with no special equipment	35	148	43
Art-on-a-cart; no dedicated space	0	—	—
Classrooms only	5	148	37
Other	0	—	—
Visual arts are not taught.	8	140	40

0% 20% 40% 60% 80% 100%

NOTES: Percentages do not sum to 100 due to rounding.

Data reported in this table for Visual Arts are taken from the Visual Arts sample.

– Sample size is insufficient to provide a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Summary

Part 1 of this chapter presented variables related to the school contexts in which the arts are taught. Several patterns emerged across the arts disciplines.

- A large percentage of grade 8 students attended schools in which music and visual arts are taught, in most cases by full-time or part-time specialists. Student access to theatre and dance instruction was limited. Schools that did offer dance and/or theatre usually relied on staff other than full- or part-time specialists to provide instruction.
- Most students attended schools in which instruction following district or state curricula was offered in the subjects of music and visual arts, but not in theatre or dance.
- Larger percentages of students attended schools that brought in visiting artists than attended schools that sponsored visiting artist programs. Twenty percent or fewer of students attended schools that reported sponsorship of such programs.
- Most visual arts and music instruction takes place in school facilities dedicated to these subjects. Where available, dance is usually taught in gymnasiums, auditoriums, or cafeterias. Where available, theatre instruction usually takes place on a stage, or in gymnasiums, auditoriums, or cafeterias.
- Few significant relationships were found between contextual variables and student performance in the arts. More specialized school facilities were associated in some cases with higher levels of performance in music and visual arts. Other contextual variables, such as the frequency of instruction, and percentages of students enrolled in arts classes, showed no patterns of significant relationships with student performance.

Part Two

Schools, Teachers, and Theatre Learning

Schools with Theatre Programs

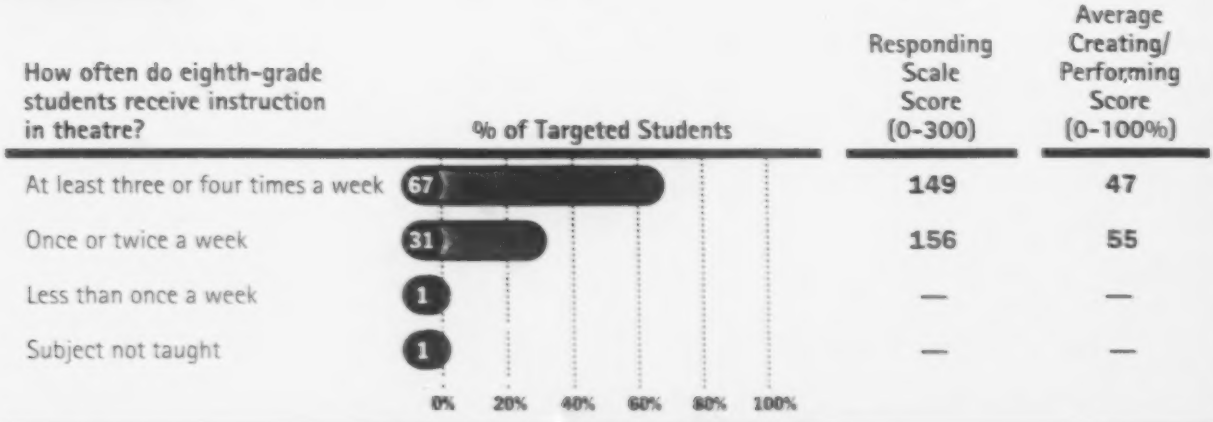
This part of Chapter 7 presents school and teacher data for the targeted theatre sample. As previously explained, schools offering at least 44 hours of a theatre course per semester, and offering courses including more than the history or literature of theatre, were identified. Students attending these schools who had accumulated 30 hours of theatre classes by the end of the 1996-97 school year were selected to take the theatre assessment. Those students comprised the targeted student sample.

As the tables in this section show, there are notable differences in theatre resources between the targeted theatre schools and the schools attended by students in the random national sample discussed in Part 1. (Readers should keep in mind that the percentage of schools where theatre is taught is very small.)

Table 7.14 presents results on the frequency of theatre instruction for targeted grade 8 students in selected schools. Sixty-seven percent of students in the targeted theatre sample attended schools where eighth graders received theatre instruction at least three to four times a week, 31 percent once or twice a week, and 1 percent less than once a week.

The frequency of theatre instruction in the schools included in the targeted theatre sample mirrors the frequency of instruction in music and visual arts in the schools included in the national random samples, as described in Part 1. There were no significant relationships between targeted student performance on the theatre assessment and frequency of theatre instruction in schools with theatre programs.

Table 7.14 **Selected* Schools' Reports on the Frequency of Theatre Instruction**



NOTES: — Sample size is insufficient to provide a reliable estimate.

* These were schools offering at least 44 hours of a theatre course per semester, including more than the history or literature of theatre.

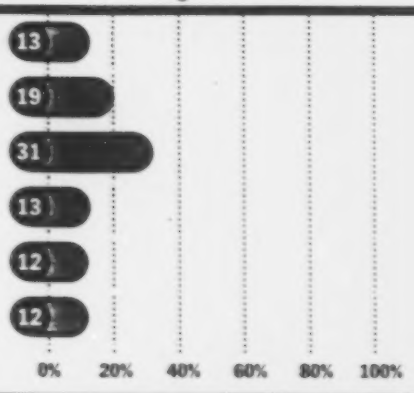
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Percentages of Students Receiving Theatre Instruction

Table 7.15 presents the percentages of grade 8 students receiving instruction in schools with theatre programs attended by targeted grade 8 students. These percentages are noticeably larger than the percentages of students receiving theatre instruction featured in Part 1 of this chapter. Thirteen percent of students in the targeted theatre sample attended schools where 0 to 10 percent of eighth graders received theatre instruction, while 31 percent attended schools where 21 to 40 percent of eighth-grade students received theatre instruction. Twenty-four percent of targeted students attended schools where 61 percent or more of grade 8 students received theatre instruction. Again, there were no significant relationships to targeted student performance.

Table 7.15 **Selected* Schools' Reports on the Percentage of Students Receiving Theatre Instruction**

During this year, what percentage of eighth graders received instruction in theatre in your school?	% of Targeted Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
0-10% of Students	13	145	53
11-20% of Students	19	144	50
21-40% of Students	31	154	49
41-60% of Students	13	—	—
61-80% of Students	12	—	—
81-100% of Students	12	—	—



NOTES: — Sample size is insufficient to provide a reliable estimate.

* These were schools offering at least 44 hours of a theatre course per semester, including more than the history or literature of theatre.

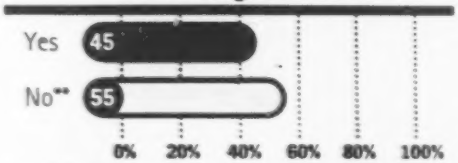
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Theatre Curricula

As indicated in Table 7.16, in contrast to the schools attended by students in the standard national sample, 45 percent of students in the targeted theatre sample attended schools that followed a district or state theatre curriculum. (In Part 1, 15 percent of students in the random national sample attended schools that followed a district or state theatre curriculum.) There were no significant relationships between the presence of such curricula and targeted student performance.

Table 7.16 **Selected* Schools' Reports on a District or State Theatre Curriculum**

Does your district or state have a curriculum in theatre that your school is expected to follow? % of Targeted Students		Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Yes	45	154	49
No**	55	149	50



NOTES: * These were schools offering at least 44 hours of a theatre course per semester, including more than the history or literature of theatre.

** Percentages and scores in this row are representative of that portion of the sample that did not respond "Yes." For this series of background questions respondents were to indicate only those statements that were applicable.

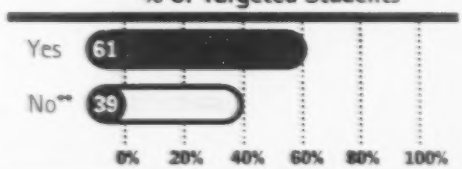
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Visiting Artists

As stated in Part 1, an important indicator of the commitment of schools to arts education is whether those schools bring in visiting artists to perform, demonstrate, or teach, and especially whether they sponsor visiting artist programs. (A deeper commitment to arts education is evidenced by sponsorship of an ongoing program.) Table 7.17 indicates that 61 percent of students in the targeted theatre sample attended schools that brought visiting artists in to perform, demonstrate, or teach in theatre.

Table 7.17 **Selected* Schools' Reports on Bringing in Visiting Artists**

In the last year, did your school bring in visiting artists to perform, demonstrate, or teach in theatre? % of Targeted Students		Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Yes	61	153	50
No**	39	148	50



NOTES: * These were schools offering at least 44 hours of a theatre course per semester, including more than the history or literature of theatre.

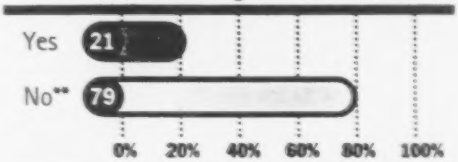
** Percentages and scores in this row are representative of that portion of the sample that did not respond "Yes." For this series of background questions respondents were to indicate only those statements that were applicable.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

According to Table 7.18, 21 percent of students in the targeted theatre sample attended schools that sponsored visiting artist programs in theatre. There were no significant relationships between percentages of targeted students that attended schools bringing in visiting artist or sponsoring visiting artist programs and student scores.

Table 7.18 **Selected* Schools' Reports on Sponsoring a Visiting Artist Program**

In the last year, did your school sponsor a visiting artist program (such as an Artist-in-the-Schools program) in theatre?	% of Targeted Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Yes	21	158	53
No**	79	149	49



NOTES: * These were schools offering at least 44 hours of a theatre course per semester, including more than the history or literature of theatre.

** Percentages and scores in this row are representative of that portion of the sample that did not respond "Yes." For this series of background questions respondents were to indicate only those statements that were applicable.

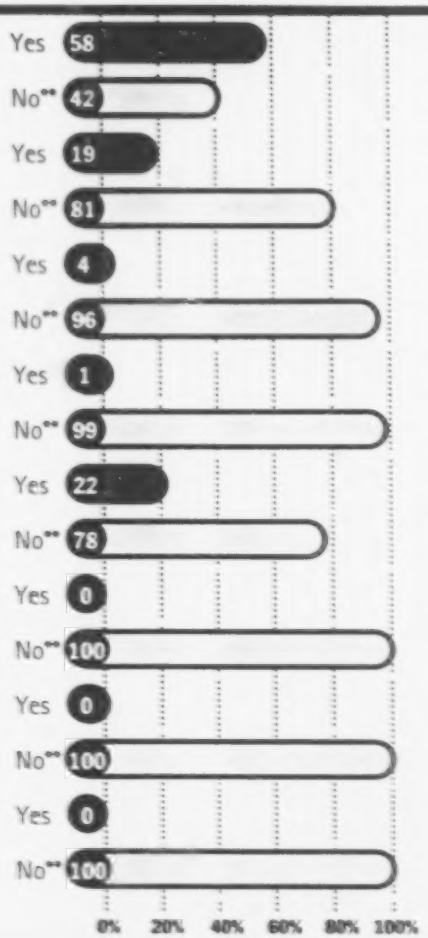
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Positions of Those Teaching Theatre

Table 7.19 presents data on the positions of those teaching theatre in selected schools where theatre is part of the curriculum. The patterns shown in this table differ from those shown in Part 1 of this chapter. Fifty-eight percent of students in the targeted theatre sample attended schools that relied on full-time specialists to teach theatre to eighth graders. Nineteen percent of targeted students attended schools that relied on part-time specialists to teach eighth graders, and 22 percent attended schools that relied on other faculty members. There were no significant relationships with targeted student achievement.

Table 7.19 Selected* Schools' Reports on the Positions of Theatre Teachers

What is the position of the person(s) on your staff who teach theatre to eighth graders?		% of Targeted Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Full-time specialist	Yes	58	149	48
	No**	42	153	52
Part-time specialist	Yes	19	146	52
	No**	81	152	49
English or language arts teacher	Yes	4	—	—
	No**	96	150	50
Elementary classroom teacher	Yes	1	—	—
	No**	99	151	50
Other faculty member	Yes	22	—	—
	No**	78	149	49
Artist-in-residence	Yes	0	—	—
	No**	100	151	50
Volunteer	Yes	0	—	—
	No**	100	151	50
Theatre is not taught.	Yes	0	—	—
	No**	100	151	50



NOTES: — Sample size is insufficient to provide a reliable estimate.

* These were schools offering at least 44 hours of a theatre course per semester, including more than the history or literature of theatre.

** Percentages and scores in this row are representative of that portion of the sample that did not respond "Yes." For this series of background questions respondents were to indicate only those statements that were applicable.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

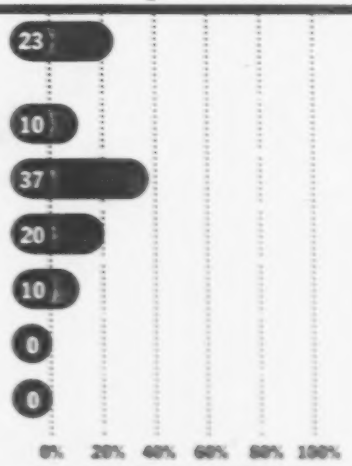
Space for Theatre Teaching

The spaces and facilities available in schools to teach the arts are important indicators of the level of commitment to arts education. Table 7.20 features the kinds of space resources available in schools attended by students in the targeted theatre sample. Twenty-three percent of targeted students attended schools that had stages with special equipment for theatre teaching, 10 percent attended schools with stages without special equipment for theatre teaching, and another 37 percent attended schools with rooms dedicated to theatre teaching. Ten percent of targeted students attended schools that used classrooms for theatre teaching.

For this variable, targeted students who attended schools that had stages with special equipment for theatre teaching had higher average Responding scale scores than did targeted students who attended schools with rooms dedicated to theatre teaching. The difference between the average Creating/Performing scores of those groups of students, though it appears to be large, is not significant.

Table 7.20 **Selected* Schools' Reports on the Space Available for Teaching Theatre**

Which best describes the space for the teaching of theatre in your school?	% of Targeted Students	Average Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Stage with special equipment (e.g., curtains, dressing rooms)	23	161	54
Stage without special equipment	10	—	—
Room(s) dedicated to theatre teaching	37	141	46
Gymnasium, auditorium, or cafeteria	20	—	—
Classrooms only	10	—	—
Other	0	—	—
Theatre is not taught.	0	—	—



NOTES: — Sample size is insufficient to provide a reliable estimate.

* These were schools offering at least 44 hours of a theatre course per semester, including more than the history or literature of theatre.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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Teachers at Schools with Theatre Programs

Given the current interest in strengthening arts learning in the schools, it is useful to explore the backgrounds of, resources available to, and instructional practices of teachers of eighth-grade theatre. As previously explained, teachers of the targeted sample of eighth-grade theatre students received a questionnaire. Their responses provide additional information about the contexts in which theatre learning takes place.

Teacher Certification and Professional Development

According to Table 7.21, most students (68 percent) in the targeted theatre sample were taught by teachers who had teaching certification in theatre recognized by the state in which they taught. Twenty-six percent of targeted students were taught by teachers without such certification. There were no significant relationships between student scores and theatre teacher certification.

Table 7.22 features results on teacher involvement in seven professional development activities. For each activity, the table presents percentages, Responding scale scores, and average Creating/ Performing scores for three groups of targeted students: (1) students whose teachers engaged in that activity, (2) students whose teachers did not engage in that activity but did engage in one of the other activities listed, and (3) students whose teachers did not engage in any of the listed activities.

Table 7.21 Teachers' Reports on Whether They Have a Teaching Certificate in Theatre for the Targeted Student Sample

Do you have teaching certification in theatre that is recognized by the state in which you teach?	% of Targeted Students	Responding Scale Score (0–300)	Average Creating/ Performing Score (0–100%)
Yes	68	151	50
No*	26	161	51
Not offered in my state	6	—	—

0% 20% 40% 60% 80% 100%

NOTES: * Percentages and scores in this row are representative of that portion of the sample that did not respond "Yes." For this series of background questions respondents were to indicate only those statements that were applicable.

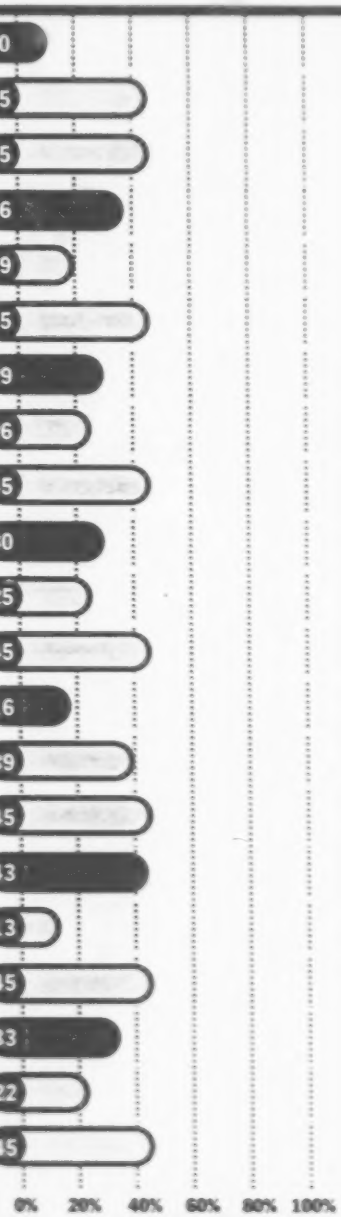
— Sample size is insufficient to provide a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

As shown in the table, 43 percent of targeted students were taught by teachers who had participated in professional development activities in acting. Approximately one third of students taking the theatre assessment had teachers who had participated in professional development activities in play production, technical theatre, design, and directing. Forty-five percent of targeted students were taught by teachers who reported no professional development activities in any of the seven areas in the last five years. There were no patterns of significant relationships between teacher participation in professional development activities and targeted student achievement.

Table 7.22 Teachers' Reports on Whether They Have Spent Time in Theatre Professional Development Activities for the Targeted Student Sample

During the past five years, have you participated in professional development activities in any of the following areas, either in college or university course or in workshops?		% of Targeted Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Filmmaking	Yes	10	149	55
	No, other activity*	45	148	49
	None**	45	152	49
Play Production	Yes	36	144	49
	No, other activity*	19	158	53
	None**	45	152	49
Technical Theatre	Yes	29	151	48
	No, other activity*	26	146	52
	None**	45	152	49
Design (e.g., sets, costumes, makeup, lighting)	Yes	30	148	46
	No, other activity*	25	149	54
	None**	45	152	49
Playwriting/ screen writing	Yes	16	128	41
	No, other activity*	39	157	54
	None**	45	152	49
Acting	Yes	43	151	51
	No, other activity*	13	142	47
	None**	45	152	49
Directing	Yes	33	144	48
	No, other activity*	22	155	53
	None**	45	152	49



NOTES: Percentages do not sum to 100 due to rounding.

* Percentages and scores in this row are representative of that portion of the sample that did not respond "Yes" to this activity, but did indicate involvement in one or more of the other activities in Table 7.22. For this series of background questions respondents were to indicate only those statements that were applicable.

** The percentage and scores in this row are representative of that portion of the sample that did not respond "Yes" to any of the activities in Table 7.22.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Teacher Resources

The facilities that schools make available to teachers are important factors in judging the status of arts education. According to Table 7.23, 39 percent of the students in the targeted theatre sample had teachers who indicated that they got all or most of the instructional materials and other resources they needed to teach their theatre classes. Another 58 percent of targeted students had teachers who indicated that they got some of the resources they needed, and 4 percent of students had teachers who indicated getting none of the resources they needed. Targeted students whose teachers indicated that they got most of the resources they needed had higher average Responding scale scores than their peers whose teachers indicated getting some of the resources they needed.

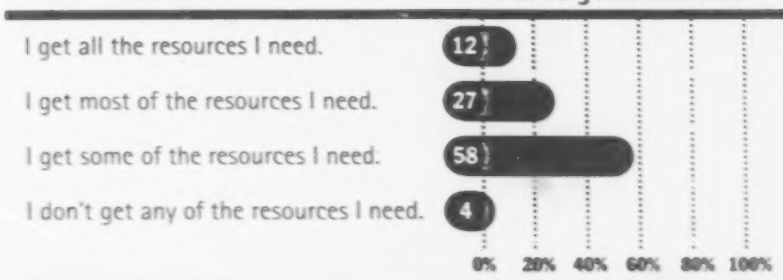
Among the resources theatre teachers require are adequate spaces for teaching students how to Create and Perform. Table 7.24 features results on six kinds of stage facilities reported by teachers of targeted students. For each stage facility, the table presents percentages, Responding scale scores, and average Creating/Performing scores for three groups of targeted students: (1) students whose teachers reported having that stage facility, (2) students whose teachers reported not having that facility but having one of the other facilities listed, and (3) students whose teachers reported not having any of the listed stage facilities.

Table 7.24 indicates that 51 percent of the targeted sample of theatre students had teachers who reported having stage facilities with more than one curtain, while the teachers of 65 percent of targeted students reported having stage facilities with sound systems. Another 58 percent of students had teachers who reported having stage facilities with lighting and controls. Fifteen percent of students taking the theatre assessment had teachers who reported not having any of the listed stage facilities. There were no significant relationships with student scores.

Finally, teachers of students taking the theatre assessment were asked whether they had curriculum

Table 7.23 Teachers' Reports on Whether They Get the Instructional Resources They Need for the Targeted Student Sample

Which of the following statements is true about how well your school system provides you with the instructional materials and other resources you need to teach your class?



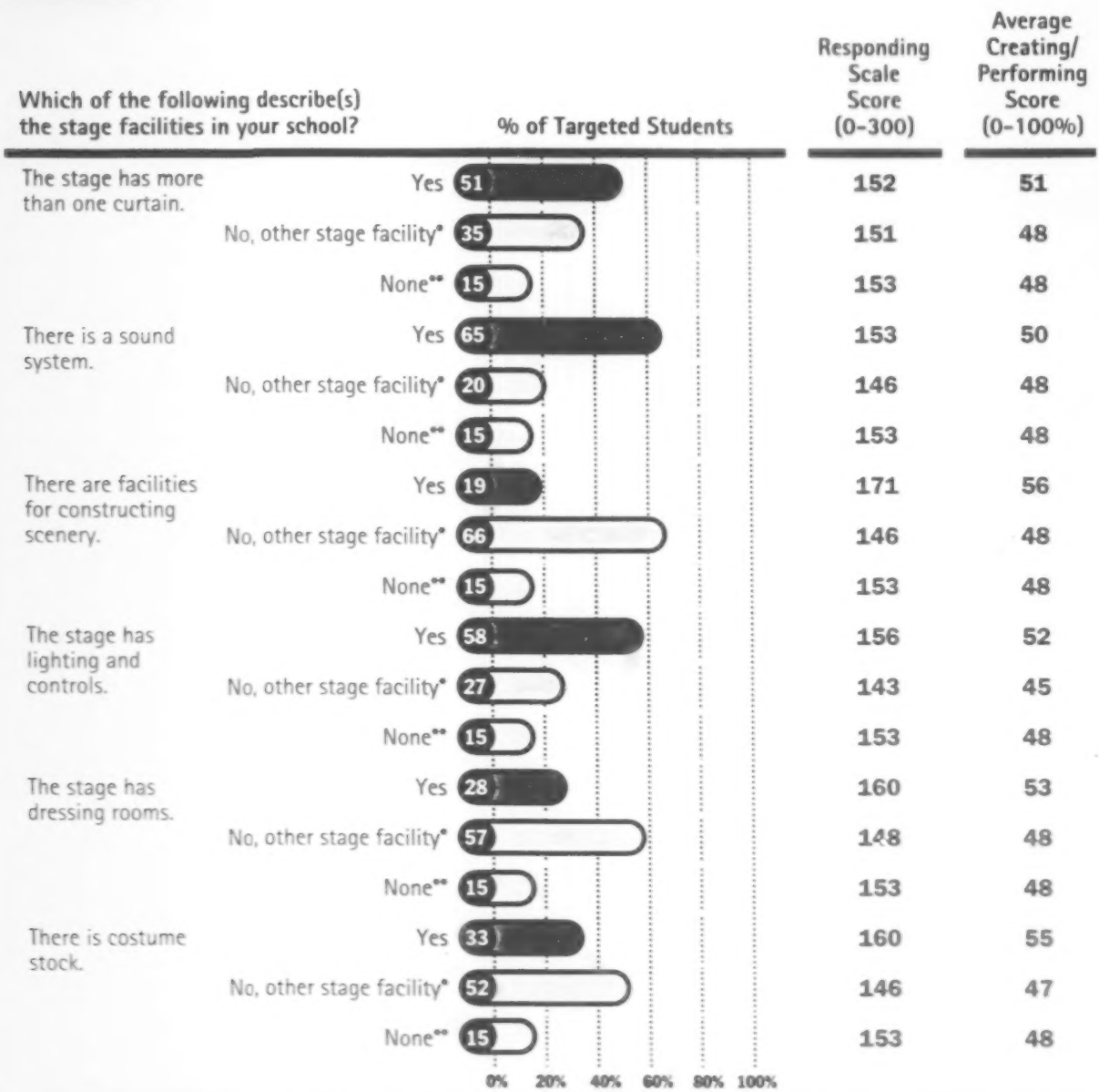
	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
I get all the resources I need.	—	—
I get most of the resources I need.	161	54
I get some of the resources I need.	141	46
I don't get any of the resources I need.	—	—

NOTES: Percentages do not sum to 100 due to rounding.

— Sample size is insufficient to provide a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 7.24 Teachers' Reports on Theatre Stage Facilities for the Targeted Student Sample


Which of the following describe(s) the stage facilities in your school?
% of Targeted Students
Responding Scale Score (0-300)
Average Creating/ Performing Score (0-100%)
The stage has more than one curtain.
Yes 51 152 51
No, other stage facility* 35 151 48
None** 15 153 48
There is a sound system.
Yes 65 153 50
No, other stage facility* 20 146 48
None** 15 153 48
There are facilities for constructing scenery.
Yes 19 171 56
No, other stage facility* 66 146 48
None** 15 153 48
The stage has lighting and controls.
Yes 58 156 52
No, other stage facility* 27 143 45
None** 15 153 48
The stage has dressing rooms.
Yes 28 160 53
No, other stage facility* 57 148 48
None** 15 153 48
There is costume stock.
Yes 33 160 55
No, other stage facility* 52 146 47
None** 15 153 48
0% 20% 40% 60% 80% 100%

NOTES: Percentages do not sum to 100 due to rounding.

* Percentages and scores in this row are representative of that portion of the sample that did not respond "Yes" for this facility, but did indicate having one or more of the other stage facilities in Table 7.24. For this series of background questions respondents were to indicate only those statements that were applicable.

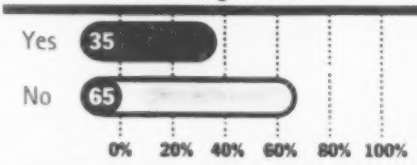
**The percentage and scores in this row are representative of that portion of the sample that did not respond "Yes" to any of the facilities in Table 7.24.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

specialists to help or advise them in theatre or drama (Table 7.25). About a third of targeted students had teachers who reported that they did have such a resource, while 65 percent of targeted students had teachers who reported not having this resource. There were no significant relationships with student scores.

Table 7.25 **Teachers' Reports on Whether a Theatre Curriculum Specialist is Available for the Targeted Student Sample**

Is there a curriculum specialist to help or advise you in theatre/drama?	% of Targeted Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Yes	35	153	48
No	65	149	50



SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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Instructional Practices

The place of arts instruction in school curricula, as well as the nature of arts instructional practices, are of great interest to those concerned with arts education. This interest is demonstrated in the voluntary *National Standards for Arts Education*, which describes what students learning the arts in school should know and be able to do.[6] Teachers of the targeted students who took the theatre assessment were asked questions about the place of theatre instruction in their schools, how closely their instruction matched the voluntary *Standards*, and what sorts of activities targeted students were asked to do in their theatre classes.

Table 7.26 features results for six kinds of theatre instruction reported by teachers. For each kind of instruction, the table presents percentages, Responding scale scores, and average Creating/Performing scores for three groups of targeted students: (1) students whose teachers reported having that kind of theatre instruction, (2) students whose teachers reported not having that kind of theatre instruction but having one of the other kinds listed, and (3) students whose teachers reported not having any of the kinds of theatre instruction listed.

According to Table 7.26, the teachers of approximately one third of targeted students taught theatre as part of a K-12 curriculum, or part of a shorter but sequential theatre curriculum. Particularly interesting in light of the recent focus on integrating the arts with other subjects, 38 percent of students had teachers whose theatre instruction was integrated with other academic curricula.[7] Twenty-nine percent of students had teachers whose theatre instruction was integrated with other arts curricula. There were

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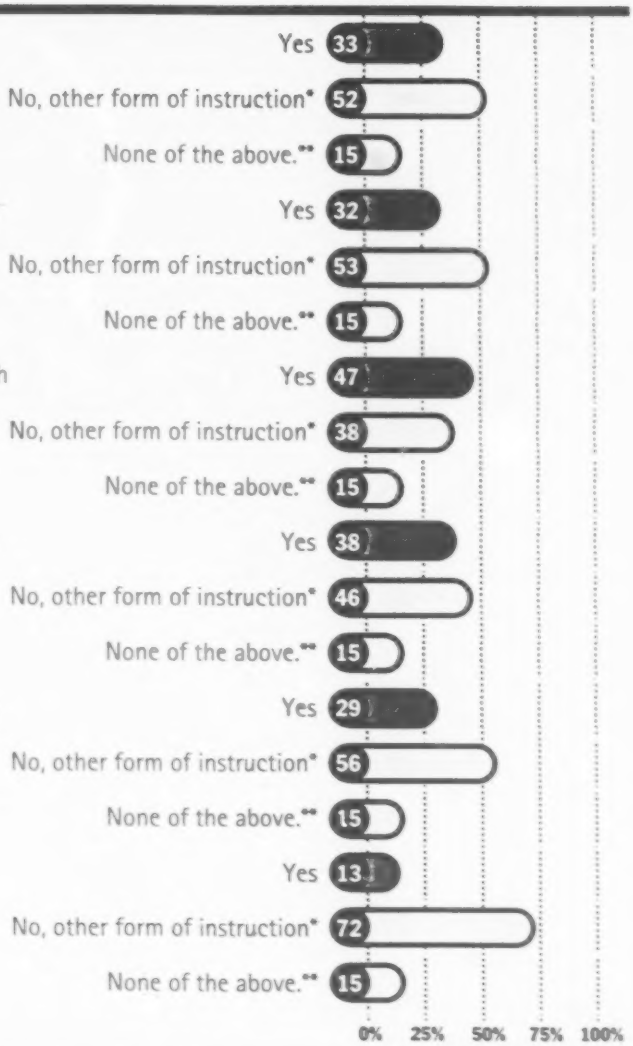
6 *National Standards for Arts Education* (1994). Reston, Virginia: Music Educators National Conference.

7 Boston, B. O. *Connections: The arts and integration of the high school curriculum*. New York: College Entrance Examination Board and Getty Center for Education in the Arts, 21.

Table 7.26 Teachers' Reports on the Place of Theatre in the Curriculum for the Targeted Student Sample

Which of the following statements describe(s) your theatre instruction?	% of Targeted Students	Responding Scale Score (0–300)	Average Creating/ Performing Score (0–100%)
It is part of a K–12 curriculum.	Yes 33	147	50
	No, other form of instruction* 52	156	52
	None of the above.** 15	136	41
It is part of a shorter but sequential theatre curriculum.	Yes 32	160	55
	No, other form of instruction* 53	149	49
	None of the above.** 15	136	41
It is coordinated with or related to local, district, or state theatre standards.	Yes 47	153	51
	No, other form of instruction* 38	152	51
	None of the above.** 15	136	41
It is integrated with other academic curricula.	Yes 38	159	54
	No, other form of instruction* 46	148	48
	None of the above.** 15	136	41
It is integrated with other arts curricula.	Yes 29	150	50
	No, other form of instruction* 56	154	52
	None of the above.** 15	136	41
It is part of the English/language arts curriculum.	Yes 13	—	—
	No, other form of instruction* 72	153	50
	None of the above.** 15	136	41



NOTES: Percentages do not sum to 100 due to rounding.

* Percentages and scores in this row are representative of that portion of the sample that did not respond "Yes" for this form of theatre instruction, but did indicate another form or forms of theatre instruction in Table 7.26. For this series of background questions respondents were to indicate only those statements that were applicable.

**The percentage and scores in this row are representative of that portion of the sample that did not respond "Yes" to any of the forms of theatre instruction in Table 7.26.

— Sample size is insufficient to provide a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

no significant relationships between kinds of theatre instruction and targeted student performance.

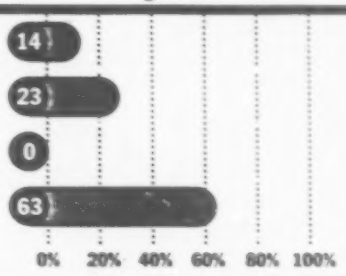
Table 7.27 features teachers' familiarity with the *National Standards for Arts Education*, in terms of student percentages. The voluntary *National Arts Standards*, although still unread by the teachers of 63 percent of the students taking the theatre assessment, has had a clear influence. Approximately 40 percent of targeted students had teachers who reported a degree of match between their instruction and the *Standards:* teachers of 23 percent of targeted students reported a moderate match, and teachers of 14 percent of students indicated that there was a close match between their teaching and the *Standards*. There were no significant relationships with student performance.

Table 7.28 presents data about what sorts of activities students in the targeted theatre sample were asked to do by their theatre teachers. (See continuation of Table 7.28 on page 174.) The most frequent activities were creating characters or scenes by improvisation and performing for audiences. Twenty-five percent of targeted students had teachers who reported asking their students to do improvisations almost every day, while 38 percent of students had teachers who asked their students to do improvisations once or twice a week. Nearly 30 percent of targeted students had teachers who asked their students to perform for an audience almost every day, and another 21 percent had teachers who asked students to do this once or twice a week.

Less-frequent activities were reading about theatre, directing a play or scene, or critiquing a play or scene, although a good portion of students did these things once or twice a month. There were no significant relationships between frequencies of classroom activities and targeted student performance.

Table 7.27 Teachers' Reports on the Match Between Their Theatre Instruction and National Standards

To what extent does your theatre instruction match the standards for theatre in the voluntary *National Standards for Arts Education?*	**% of Targeted Students**	**Responding Scale Score (0-300)**	**Average Creating/ Performing Score (0-100%)**
There is a close match.	14	—	—
There is a moderate match.	23	143	45
There is a weak match.	0	—	—
I have not read the *Standards*.	63	156	52

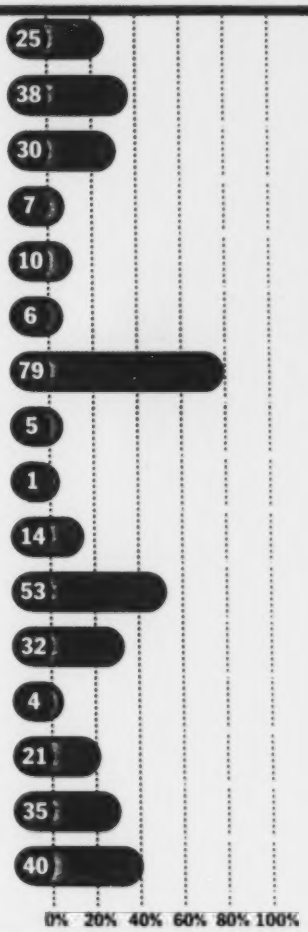


NOTE: — Sample size is insufficient to provide a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table 7.28 Teachers' Reports on How Often Their Students Engage in Theatre Instructional Activities for the Targeted Student Sample

How often do you ask students in this class to do the following?		% of Targeted Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Create characters or scenes by improvisation	Almost Every Day	25	144	45
	Once or Twice a Week	38	160	53
	Once or Twice a Month	30	147	51
	Never or Hardly Ever	7	—	—
Read a play aloud	Almost Every Day	10	—	—
	Once or Twice a Week	6	123	34
	Once or Twice a Month	79	151	50
	Never or Hardly Ever	5	—	—
Write a play or scene	Almost Every Day	1	—	—
	Once or Twice a Week	14	154	49
	Once or Twice a Month	53	152	50
	Never or Hardly Ever	32	144	47
Do technical aspects of theatre	Almost Every Day	4	—	—
	Once or Twice a Week	21	149	47
	Once or Twice a Month	35	163	53
	Never or Hardly Ever	40	145	49



NOTE: — Sample size is insufficient to provide a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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Table 7.28 (cont.) **Teachers' Reports on How Often Their Students Engage in Theatre Instructional Activities for the Targeted Student Sample**

How often do you ask students in this class to do the following?		% of Targeted Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Perform for an audience	Almost Every Day	29	149	48
	Once or Twice a Week	21	146	49
	Once or Twice a Month	46	153	51
	Never or Hardly Ever	4	—	—
Read about theatre	Almost Every Day	0	—	—
	Once or Twice a Week	11	—	—
	Once or Twice a Month	41	156	50
	Never or Hardly Ever	47	152	51
Direct a play or scene	Almost Every Day	1	—	—
	Once or Twice a Week	6	—	—
	Once or Twice a Month	40	144	48
	Never or Hardly Ever	53	154	50
Critique a play they have seen	Almost Every Day	1	—	—
	Once or Twice a Week	3	—	—
	Once or Twice a Month	39	155	51
	Never or Hardly Ever	58	151	50

NOTES: Percentages do not sum to 100 due to rounding.

– Sample size is insufficient to provide a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Summary

The previous section provided information from two background questionnaires. The school questionnaire for theatre supplied information about school resources for theatre learning. The theatre teacher questionnaire provided information about teacher background and theatre instructional practices. The following points emerged from this discussion.

- Most students in the targeted theatre sample attended schools where eighth graders received theatre instruction at least three or four times a week.
- Almost half the targeted students were in schools in which a district or state theatre curriculum was expected to be followed.
- Most of the targeted students attended schools that brought in visiting artists to perform, demonstrate, or teach in theatre; about one fifth of the theatre students attended schools that sponsored a visiting artist program.
- Teachers of most students in the targeted theatre sample were either full-time or part-time specialists, held state teacher certification in theatre, and gave instruction in school facilities dedicated to theatre or on a stage. Thirty-nine percent of targeted students were taught by teachers who reported receiving most or all of the resource materials they needed to teach their classes.
- The most common theatre classroom activities for targeted students included creating characters or scenes by improvisation and performing for an audience.

Appendix A

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Appendix A

Overview of Procedures Used for the NAEP 1997 Arts Assessment

Introduction

Conducting a large-scale assessment such as the National Assessment of Educational Progress (NAEP) entails the successful coordination of numerous projects, committees, procedures, and tasks. This appendix provides an overview of the NAEP 1997 arts assessment's primary components: *Framework*, instrument development, administration, scoring, and analysis. A more extensive review of the procedures and methods used in the arts assessment will be included in the forthcoming *NAEP 1997 Arts Analysis Technical Report.*[1]

The NAEP 1997 Arts Assessment

The *Framework* for the 1997 arts assessment was produced under the auspices of the National Assessment Governing Board through a consensus process managed by the Council of Chief State School Officers, which worked with the College Board and the Council for Basic Education. The framework was developed over an eighteen-month period between September of 1992 and March of 1994. The following factors guided the process for developing consensus on the arts *Framework* and its exercise specifications:[2]

- The assessment should affirm and articulate the arts as ways of knowing and forms of knowledge with a unique capacity to integrate the intellect, the emotions, and physical skills in the construction of meaning.
- The assessment should assess students' knowledge, attitudes, and performance in the modalities and forms of expression characteristic of the arts (music, dance, painting or drawing, acting) as well as verbal or written linguistic modes, i.e., writing or talking about the arts.
- Assessment should go beyond quantification to include critical judgment. An effort should be made to ensure that reporting includes descriptive information on student performance as well as numerical data.
- The feasibility of producing appropriate subscales by artistic process (Creating, Performing, Responding) within each arts discipline should be investigated. If feasible, separate subscores for artistic process within each arts discipline should be reported by grade level.
- The assessment should use a common list of background variables to recognize differences and inequities in school resources and the conditions related to achievement, such as teacher qualifications, instructional time in the arts, school structure, cultural and social background of the school community, and incentives. This recognition must be evident in

1 in press

2 National Assessment Governing Board. (1994). *Arts education assessment framework* (pre-publication ed.) Washington, DC: Author; National Assessment Governing Board. (1994). *Arts education assessment and exercise specifications* (pre-publication ed.) Washington, DC: Myford, C. and the College Board.

Figure A.1 **Descriptions of the Three Processes**

Creating	Refers to generating original art. This may include, but should not be limited to, the expression of a student's unique and personal ideas, feelings, and responses in the form of a visual image, a character, a written or improvised dramatic work, or the composition or improvisation of a piece of music or a dance.
Performing/ Interpreting	Means performing an existing work, a process that calls upon the interpretive or re-creative skills of the student. Typically, "performing" an existing work does not apply to the visual arts, where reproducing an artist's existing work is not central. However, it does suggest the engagement and motivation involved in creating a work of art.
Responding	Varies from that of an audience member to the interactive response between a student and a particular medium. The response is usually a combination of affective, cognitive, and physical behavior. Responding involves a level of perceptual or observational skill; a description, analysis or interpretation on the part of the respondent; and sometimes a judgment or evaluation based on some criteria which may be self-constructed or commonly held by a group or culture. Responding calls on higher order thinking and is central to the creative process. Although a response is usually thought of as verbal (oral or written), responses can and should also be conveyed non-verbally or in the art forms themselves. Major works of art in all traditions engage artists in a dialogue that crosses generations.

SOURCE: *Arts education assessment framework.* National Assessment Governing Board. (1994). Washington, DC: Author.

reporting the data. Results have meaning only in terms of the availability and continuity of arts education.

- The assessment should address both processes and products, and expand the public's information about the importance of each.
- The assessment should be based on a comprehensive vision of arts education and should communicate that vision clearly. The assessment should focus on what ought to be in arts education rather than what is, but idealism should be tempered with reality. Hence, exercises should model multifaceted and thoughtful activities, without making unreasonable demands on time, materials, and human resources.
- To stimulate support for arts education, the assessment should produce information useful to a variety of audiences—students, artists, teachers, and administrators; local, state and national policymakers; and community members such as parents, business persons, etc.—and be disseminated in a variety of ways for different audiences.
- The assessment should reflect a pluralistic view of arts education, both in terms of individual products and the cultural bases of the arts. It should be oriented toward the demonstration of student learning, be sensitive to a variety of instructional approaches, include the range of contemporary theories evident in arts education, and include examples of appropriate exercises addressing universal themes.

The Framework Design

The *Framework* for the 1997 arts assessment is represented as a matrix with two dimensions represented by the four arts disciplines (dance, music, theatre, and visual arts) and the three processes (Creating, Performing, and Responding). Figure A.1 describes the Creating, Performing, and Responding processes in the four arts disciplines.

Distribution of Assessment by Process Areas

Table A.1 summarizes the percentage of assessment time devoted to each process in the arts assessment, by arts discipline. Care was taken to ensure the congruence between the percentages used in the assessment (actual) and those as recommended by the discipline-specific subcommittees of the framework committee (specified).

Table A.1 **Specified and Actual Distribution of Assessment Time Across Arts Processes**

	Music		Theatre		Visual Arts	
	Actual	Specified*	Actual	Specified*	Actual	Specified*
Creating	30%	20-30%	–	–	70%	50-70%
Performing	35%	35-45%	–	–	–	–
Creating/Performing	–	–	67%	60%	–	–
Responding	35%	30-40%	33%	40%	30%	30-50%

* *1996 NAEP Arts Education Assessment Framework* (pre-publication ed.)
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

The Assessment Design

The assessments in music, theatre, and visual arts included "blocks"[3] or sets of questions, of approximately 25 or 50 minutes. Each block consisted of one or more stimuli and sets of multiple-choice, constructed-response, or Creating/Performing items to assess students' mastery of material. Table A.2 summarizes the number of blocks by arts discipline. The grade 8 music assessment included five Creating/Performing blocks and four Responding blocks. The five Creating/Performing blocks were divided into three Creating/Performing blocks for students in the general population, and two Creating/Performing blocks for students currently active in some type of music activity. All students sampled for the music assessment completed one of the Creating/Performing blocks for the general student population and two Responding blocks. In addition, a small sample of students who indicated current involvement in a music activity completed one of the two additional Creating and Performing blocks as a fourth block. The grade 8 theatre assessment included three Creating/Performing blocks and four Responding blocks. All theatre students completed one Creating/Performing block and two Responding blocks. The grade 8 visual arts assessment included three Creating blocks and four Responding blocks. All students sampled for visual arts completed either one Responding block and one Creating block or two Responding blocks.[4]

Table A.2 **Total Number of Blocks by Arts Discipline**

	Music		Theatre		Visual Arts	
	Total	Number Completed by an Individual Student	Total	Number Completed by an Individual Student	Total	Number Completed by an Individual Student
Creating/Performing	5	1*	3	1	3	0 or 1
Responding	4	2	4	2	4	1 or 2

NOTES: The five Creating/Performing blocks in the music assessment included 3 blocks for the general student population and 2 blocks for a subsample of students who were currently enrolled in a music activity.

* Students who were selected as part of the subsample of music students completed 2 blocks: 1 block of activities for students from the general population and 1 block of activities for students in the music subsample.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

3 "Blocks" are collections of questions grouped, in part, according to the amount of time required to answer them.

4 In visual arts, three of the four Responding blocks featured Creating tasks.

Item Types and Scoring Guides

The data presented in Table A.3 reflect the number of questions by item type for the 1997 arts assessment. The assessment pool for the three arts disciplines assessed contained a total of 168 unique questions — 41 multiple-choice, 97 constructed-response, and 30 Creating/Performing tasks. Most of the Creating/Performing tasks were scored with multiple scoring guides. The total number of scoring guides for such tasks was 106, with 63 in music, 22 in theatre, and 21 in visual arts.

Using information gathered from the field test, the booklets were carefully constructed to balance time requirements for the questions in each block. More information on the design of the assessment is presented in the forthcoming *NAEP 1997 Arts Analysis Technical Report.*

Student Questionnaires

Each booklet in the assessment also included several sets of background questionnaires. Students sampled for the 1997 arts assessment completed one 5-minute set of student demographic background questions and one 10-minute set of subject-specific background questions. The subject-specific background questionnaires were designed to gather contextual information about students, their instructional and out-of-school arts experiences, and their attitudes toward the art domain in which they were being assessed. The specific content of each of the background questionnaire sections is provided below:

- The student demographic background questionnaire included a common set of questions about students' race/ethnicity, language spoken in the home, parents' level of education, number of reading materials in the home, amount of television watched by students, the amount of homework assigned, and which parents live at home.
- The student subject-specific questionnaires covered three general categories of information: students' interest in the subject; students' in-school experiences in the subject; and students' out-of-school experiences in the subject. These 10-minute sections contained 37 questions for music, 45 questions for theatre, and 33 questions for visual arts.

The types of questions asked in each of the three categories of the subject-specific questionnaires are described as follows: students' interest in the subject included students' ratings of their interest and ability in the subject. For example, in music, three of the statements to which students were asked to respond "Agree," "Not Sure," or "Disagree," included: "I like to listen to music," "I think I have talent for music," and "People tell me I am a good musician." (Analysis of the relationship between students' reported interest in an arts discipline and assessment performance is beyond the scope of this report.) Students' in-school experiences were characterized by the frequency with which their teachers provided various subject-related instructional activities during class and by student participation in various arts-related activities during school. Students' out-of school experiences were characterized by the frequency with which students were involved in various arts-related activities outside of school, not in connection with school work.

Table A.3 **Distribution of Questions by Item Type**

	Music	Theatre	Visual Arts
Multiple-Choice	21	8	12
Constructed-Response	35	38	24
Performing/Creating	14	6	10

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Teacher Questionnaire

To supplement the information on instruction reported by students, the theatre teachers of the targeted students participating in the NAEP theatre assessment were asked to complete a questionnaire about instructional practices, teaching backgrounds, and characteristics. The results of the field tests in music and visual arts showed high percentages of missing data for the music and visual arts teachers' questionnaires. Because of this, teacher questionnaires were not administered in the operational music and visual arts assessments. The theatre teacher questionnaire was divided into three parts. The first part contained 85 questions about teachers' general educational background and training. The second part contained 25 questions pertaining to teachers' background, activities, and preparation in theatre. The third section contained 50 questions on specific instructional practices.

School Questionnaire

Principals of students sampled for the assessment were asked to complete a questionnaire about the school's characteristics and students' access to instruction in the arts. The school questionnaire covered three broad areas. The first part pertained to the availability of courses in the arts and students' access to computers. The second part asked questions about the status of staff members teaching in the arts, the facilities and available resources for the arts, and the existence of special programs in the arts, such as artists-in-residence and summer arts programs. The final part of the school questionnaire pertained to demographics at the school, such as school enrollment. It also included variables used to describe the general climate of the school, such as attendance rates of students and staff, and the frequency of various problems in the school.

SD/LEP Questionnaire

An additional questionnaire was designed to gather information about students with disabilities (SD) and students who have limited English proficient (LEP) skills.

The SD/LEP questionnaire was completed by a school staff member knowledgeable about those students who were selected to participate in the assessment and who were identified as (1) having an Individual Education Plan (IEP) or equivalent plan (for reasons other than being gifted or talented) or (2) having limited English skills. A questionnaire was completed for sampled students who were disabled or had limited English skills regardless of whether the student participated in the assessment. Each questionnaire took approximately five minutes to complete and asked about the student's background and the special programs in which he or she may have been enrolled.

National School and Student Samples

The *Framework* called for assessments in all four arts disciplines at grades 4, 8, and 12. In 1995, field tests were conducted in all of the arts disciplines at grades 4 and 8. Field tests for all of the arts disciplines at grade 12 were conducted in 1997. Because of financial limitations, it was not possible to conduct final assessments in all arts disciplines at grades 4, 8, and 12. Members of the Arts Standing Committee therefore recommended that final assessment activities be conducted at grade 8 so that the *Framework* could be fully assessed at one grade.

Results of the field test in dance indicated that too few schools offered dance instruction at grade 8 to obtain a nationally representative sample of dance-educated students. Based on these findings, members of the National Center for Education Statistics (NCES), the National Assessment Governing Board, and representatives from the dance community recommended that a targeted sample of grade 8 students complete the dance assessment. However, a student sample of sufficient size and distribution could not be located.

Based on the results of the 1995 field test in theatre, members of the Theatre Test Development Committee recommended that theatre items be administered only to students who had undergone theatre instruction. Therefore, the theatre assessment at grade 8 was administered to a "targeted" sample of students selected only from schools with theatre programs.

The visual arts assessment was administered to a nationally representative random sample of students. All four of the Responding blocks and three of the Creating/Performing blocks in the music assessment were administered to a

nationally representative random sample of students. In addition, two additional Creating/Performing blocks of exercises were administered to a subsample of students who were currently enrolled in some type of in-school or out-of-school musical activity.

For the music and visual arts assessments, the national and regional results presented in this report are based on nationally representative probability samples of all eighth-grade students. The results for theatre are based on a representative sample of eighth-grade theatre students representing those schools in the nation with an extensive theatre curriculum. The samples were selected using a complex multistage sampling design that involved sampling students from selected schools within selected geographic areas across the country. The sample design had the following stages:

1. Selection of geographic areas (a county, group of counties, or metropolitan statistical area)
2. Selection of schools (public and nonpublic) within the selected areas
3. Within each sampled school, intact classrooms of students were selected for the music and visual arts assessments. In order to ensure random sampling of students with training in each arts discipline, criteria for sampling classrooms specified that the subject taught in each classroom selected should not be the subject being assessed (e.g., classes sampled for the visual arts assessment could not be visual arts classrooms; classes sampled for the music assessment could not be music classrooms). For the theatre assessment, students were sampled randomly from within eligible schools.

Each selected school that participated in the assessment and each student assessed represents a portion of the population of interest. Sampling weights are needed to make valid inferences between the student samples and the respective populations from which they were drawn. In addition, NAEP oversamples nonpublic schools and schools in which more than 15 percent of the student population is non-White. Sampling weights adjust for disproportionate representation due

Table A.4 **1997 School, Student, and Teacher Questionnaire Participation Rates**

	Weighted School Participation Rate Percentages	Total Number of Schools Participating	Weighted Student Participation Rate Percentages	Total Number of Students Assessed	Weighted Percentage of Students Matched to a School Questionnaire	Total Number of Students Matched to a School Questionnaire
Music	**80**	**98**	**91**	**2,275**	**94**	**2,114**
Public	79	84	91	1,999		
Nonpublic	83	14	94	276		
Theatre	**67**	**42**	**82**	**1,386**	**92**	**1,193**
Public	69	40	79	1,335		
Nonpublic	40	2	93	51		
Visual Arts	**84**	**128**	**91**	**2,999**	**93**	**2,799**
Public	84	116	90	2,756		
Nonpublic	85	12	95	243		

	Teacher Questionnaire Participation Rate Percentage	Total Number of Teachers Completing a Questionnaire	Weighted Percentage of Students Matched to a Teacher Questionnaire	Total Number Students Matched to a Teacher Questionnaire
Theatre	**95**	**57**	**98**	**1,320**

NOTE: A total of 567 students from the reported sample for music completed an additional supplemental music Creating or Performing block.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

to such oversampling. In the analysis of student data and reporting of results, nonresponse weighting adjustments have been made at both the school and student level, with the aim of making the sample of participating students as representative as possible of the entire eligible eighth-grade population. For details of the nonresponse weighting adjustment procedures, see the forthcoming *NAEP 1997 Arts Analysis Technical Report.*

All eighth-grade students sampled for the theatre assessment were considered eligible if they had completed at least 30 classroom hours of instruction in theatre by the end of the 1996-97 school year. There were no course requirements for eligibility for the eighth-grade students sampled for the visual arts assessment. In music, there were no course requirements for eighth-grade students sampled to complete the blocks designed for the general student population. Students sampled for the supplementary Creating/Performing blocks in music were selected from the sample of students initially selected from the general student population. Eligibility for the supplemental Creating/Performing blocks was limited to students who indicated that they either sang in a school chorus, sang outside of school, took singing lessons, played a musical instrument, took instrumental lessons, or played in a band or orchestra in school or outside of school. School officials advised assessment staff on SD/LEP accommodations necessary for individual students sampled for an assessment in a given arts discipline. Students for whom recommended SD/LEP accommodations could not be made were classified as ineligible for the assessment.

For the national sample, Table A.4 contains, for public and nonpublic schools, the unweighted total number of participating schools, total number of students assessed, and the weighted school and student participation rates. In addition, Table A.4 provides the weighted percentages of students who were matched to a completed school questionnaire. For theatre, data indicating the overall teacher questionnaire participation rate and the total number of teachers completing a questionnaire are provided. In addition, the weighted percentage of theatre students and total number of students matched to a completed theatre teacher questionnaire are indicated.

The weighted school participation rates are calculated from the number of schools that were initially selected for the assessment. For each arts discipline, the numerator of this rate is the sum of the number of students represented by each initially selected school that participated in the assessment. The denominator is the sum of the number of students represented by each of the initially selected schools that had eligible students enrolled. The denominator included both participating and nonparticipating schools.

The weighted percentages of students who participated in the assessment reflect the percentage of the eligible student population from participating schools within the jurisdiction, and represent the students who participated in the assessment in either an initial session or a make-up session. The denominator of this rate is the sum, across all assessed students by arts discipline, of the number of students represented by each selected student who was eligible to participate, including students who did not participate.

The weighted school and student participation rates for the theatre sample are lower than those typically obtained in NAEP, and, as is evident in Table A.4, are substantially lower than those obtained for the music and visual arts samples. As noted above, nonresponse adjustments were made to the sampling weights used in the analysis of all three arts disciplines in order to compensate for school and student nonparticipation. However, the lower participation rates in the theatre assessment do raise questions about the effectiveness of these adjustments and the possibility of bias in the results.

In order to provide some evidence on the extent of potential bias, analyses were conducted comparing the participating theatre schools to all schools in the theatre sample with respect to five demographic characteristics: metro status

(metro, nonmetro); type of locale (large city, mid-size city, urban fringe of large city, urban fringe of mid-size city, large town, small town, rural); affiliation (public, nonpublic), school type (public, Catholic, other religious, nonsectarian); and region (Northeast, Southeast, Central, West). In addition, comparisons were also made for three additional school enrollment variables: grade 8 enrollment, total school enrollment, and percentage of minority enrollment. In general, the participating schools were similar to the full sample of schools for most of the demographic and school enrollment variables. The participating schools were, however, more likely to come from large city locales and had, on average, lower grade 8 and total enrollments than nonparticipating schools.

Data Collection and Scoring

Materials from the NAEP 1997 arts assessment were shipped to National Computer Systems, where trained staff evaluated the responses to the constructed-response questions using scoring rubrics prepared by Educational Testing Service (ETS). Each constructed-response question had a unique scoring guide that defined the criteria used to evaluate students' responses. The extended constructed-response questions generally were evaluated with four- or five-level scoring guides, while the short constructed-response questions generally were scored with two- and three-level scoring guides. Across arts disciplines, the responses of students who *skipped* a question or performance task (but who answered questions positioned later in the test booklet or in the Creating/Performing block) were scored as incorrect for unanswered multiple-choice questions or as Level 1 (Inadequate/Unsuccessful/Unacceptable) for unanswered constructed-response items or performance tasks. Data for students who *did not reach* a given question in a test booklet or in a Creating/Performing block were excluded from analysis for that question. A student's response for a given question was classified as *not reached* if a student failed to answer the question and all others following it in a given test booklet or Creating/Performing block.

For the arts assessment, more than 240,000 constructed responses were scored. This number includes rescoring to monitor inter-rater reliability. One hundred percent of student responses for theatre performing tasks were rescored in order to determine reliability rates. For all other types of questions and tasks across all arts disciplines, 25 percent of the student responses were rescored. The overall percentages of exact agreement for the 1997 national reliability sample were 89.6 percent in music, 84.6 percent in theatre, and 86.2 percent in visual arts.

Data Analysis and IRT Scaling

After the assessment information had been compiled in the NAEP database, the data were weighted according to the sample design and the population structure. The weighting for the samples reflected the probability of selection for each student as a result of the sampling design and adjustment for nonresponse. Through poststratification, the weighting assured that the representation of certain subpopulations corresponded to figures from the U.S. Census and the Current Population Survey.[5]

Analyses were then conducted to determine the percentage of students who gave various responses to each cognitive and background question. Item response theory (IRT) was used to estimate average proficiency for the nation and various subgroups of interest within the nation. Mean percent-correct scores were developed for items classified as Creating, Performing, or Creating/Performing, and percentages of each response to each item computed.

5 For additional information about the use of weighting procedures in NAEP, see Johnson, E.G. (1989). "Considerations and techniques for the analysis of NAEP data." *Journal of Educational Statistics*, 14(4), 303-334.

IRT models the probability of answering a question correctly as a mathematical function of proficiency or skill. The main purpose of IRT analysis is to provide a common scale on which performance can be compared across groups, such as those defined by age, assessment year, or subpopulations (e.g., race/ethnicity or gender) and to make it possible to assess groups on more material than would be practical to give to any one student.

In the NAEP design, students do not receive enough questions about a specific topic to permit reliable estimates of individual performance. Traditional test scores for individual students, even those based on IRT, would contribute to misleading estimates of population characteristics, such as subgroup averages and percentages of students at or above a certain proficiency level. Instead, NAEP constructs sets of plausible values designed to represent the distribution of proficiency in the population. A plausible value for an individual is not a scale score for that individual but may be regarded as a representative value from the distribution of potential scale scores for all students in the population with similar characteristics and identical patterns of item response. Statistics describing performance on the NAEP scales are based on these plausible values. These statistics estimate values that would have been obtained had individual proficiencies been observed; that is, had each student responded to a sufficient number of cognitive questions so that his or her proficiency could be precisely estimated.[6]

For the 1997 music, theatre, and visual arts Responding exercises, separate IRT scales were constructed. Because of the separate scaling, each of the three arts assessments employed slightly different steps in data analysis and IRT scaling. The steps for each subject area are described in detail in the forthcoming *NAEP 1997 Arts Analysis Technical Report.* Because of concerns about multidimensionality, and because there were too few items to create IRT scales for Creating, Performing, or Creating/Performing, only items in the Responding categories of the arts framework were entered into the IRT scaling procedure. A single IRT scale was created for each of the three fields of art. (In music, it was necessary to fit two related scales and then combine them into a composite. The two interim music subscales differed in the dependence of their tasks on music notation and technical vocabulary.) Creating items in visual arts and music, Creating/Performing items in theatre, and Performing items in music were formed into separate percent-of-total-possible-points averages, with mean percent correct scores reported at various levels. Certain theatre items which combined aspects of Responding and Creating (e.g., "draw a set design for this play") did not fit the Responding IRT scale[7], and so were not included in that scale, but were reported on an item-level basis. All of the Creating and Performing tasks from the two music blocks that were administered to a subsample of students in the music assessment were also reported on an item-level basis. In addition, items with logical dependencies (e.g., write a new ending to a script, followed by a discussion at how that ending accomplished one's goals) were separated, with the discussions included in the IRT scale. The endings on which they depended were put in the Creating/Performing averages. This appeared to introduce no worse a violation of the local independence assumption, which underlies IRT models, than does presenting a series of questions based on a single reading passage, and the IRT scaling led to acceptable fit to the models. (Local independence assumes that, given an examinee's ability, his or her responses depend on no other dimension. If this requirement is not met, fitting a unidimensional scale to the data results in some degree of error due to model misfit.)

For each of the three subjects in the arts assessment, a Responding IRT scale with a mean of 150 and a standard deviation of 35 was created, so that the great majority of

6 For theoretical and empirical justification of the procedures employed, see Mislevy, R.J. (1988). "Randomization-based inferences about latent variables from complex samples." *Psychometrika*, 56(2), 177-196.

For computational details, see National Assessment of Educational Progress. (1990). *Focusing the New Design: NAEP 1988 Technical Report and the 1990 NAEP Technical Report.* (Princeton, NJ: Educational Testing Service).

7 Item fit was assessed by assessing fit statistics and by visual inspection of empirical vs. model-based plots.

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students had scores between 45 and 255, using a generalized partial-credit (GPC) model.[8] Developed by ETS and first used in 1992, the generalized partial-credit model permits the scaling of tasks scored according to multi-point rating schemes. The model takes full advantage of the information available from each of the student response categories used for these more complex performance tasks. It also graphically identifies pairs of adjacent scoring categories on which raters did not make reliable distinctions, allowing the analyst to collapse such categories and yield better fit to the model, and more importantly, empirically justify final scoring rubrics. Although the mean of the Responding scale for each subject has been set to 150, the scales are measuring different accomplishments. Comparisons cannot be made between student results on any pair of Responding scales, even though the scales share the same mean (150). In other words, a score of 165 in visual arts is not necessarily "better" than a score of 160 in music.

It is useful to illustrate the level of performance of students with a given scale score in a given subject by identifying questions likely to be answered correctly by students with that scale score. This process is known as "mapping." The position of a question on the Responding scale for each arts area represents the scale score attained by students who had: (1) at least a 65 percent probability of reaching a given score level on a constructed-response question, or (2) at least a 74 percent probability of correctly answering a multiple-choice question.

Readers should note that the percentages of 65 and 74 are a measurement convention adopted by NAEP. Other surveys have used 80 percent and 50 percent as measurement conventions. The probability conventions of 65 percent and 74 percent were established in 1994 for the NAEP assessments based, in part, on an intuitive judgement that they would provide a reasonable picture of students' knowledge and skills. Sixty-five and 74 percent represent a compromise between 50 percent (which was rejected on the grounds that having a 50/50 chance of getting the exercises right shows an insufficient degree of mastery) or 80 percent (which was rejected because students below that percentage still show some level of ability that would be ignored by such a stringent criterion).

Cautions in Interpretations

As described earlier, the NAEP scales for all the subjects make it possible to examine relationships between students' achievement and a variety of background factors measured by NAEP. The fact that a relationship exists between achievement and another variable, however, does not reveal the underlying cause of the relationship, which may be influenced by a number of other variables. Similarly, the arts assessments do not capture the influence of unmeasured variables. The results are most useful when they are considered in combination with other information about the student population and the educational system, such as emphases in instruction, changes in the school-age population, and societal demands and expectations placed on learning and performance.

NAEP Reporting Groups

In this report, results are provided for groups of students defined by shared characteristics – region of the country, gender, race/ethnicity, and parental education. Results are reported for subpopulations only when sufficient numbers of students are assessed and adequate school representation criteria are met. For public school students, the minimum requirement is 62 students in a particular subgroup from at least 5 primary sampling units (PSUs).[9] For nonpublic school students, the minimum requirement is 62 students from at least 5 PSUs. The data for all students, regardless of whether their subgroup was reported separately, were included in computing overall results. Definitions of the subpopulations referred to in this report follow.

Region

Results are reported for four regions of the nation: Northeast, Southeast, Central, and West. Figure A.2 shows how states are subdivided into these regions. All 50 states and the District of Columbia are listed. Territories and the two Department of Defense Educational Activities jurisdictions are not assigned to any region.

8 Muraki, E. (1992). A generalized partial credit model: Application of an EM algorithm. *Applied Psychological Measurement*, 16(2), 159-176.

9 For the national assessment, a PSU is a selected geographic region (a county, group of counties, or a metropolitan statistical area).

Figure A.2 **Regions of the Country**

Northeast	Southeast	Central	West
Connecticut	Alabama	Illinois	Alaska
Delaware	Arkansas	Indiana	Arizona
District of Columbia	Florida	Iowa	California
Maine	Georgia	Kansas	Colorado
Maryland	Kentucky	Michigan	Hawaii
Massachusetts	Louisiana	Minnesota	Idaho
New Hampshire	Mississippi	Missouri	Montana
New Jersey	North Carolina	Nebraska	Nevada
New York	South Carolina	North Dakota	New Mexico
Pennsylvania	Tennessee	Ohio	Oklahoma
Rhode Island	Virginia*	South Dakota	Oregon
Vermont	West Virginia	Wisconsin	Texas
Virginia*			Utah
			Washington
			Wyoming

*NOTE: The part of Virginia that is included in the Washington, DC metropolitan area is included in the Northeast region; the remainder of the state is included in the Southeast region.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Gender

Results are reported separately for males and females.

Race/Ethnicity

The race/ethnicity variable is derived from two questions asked of students and, where necessary, school records, and it is used to compare the performance of race/ethnicity subgroups. Two questions from the set of general student background questions were used to determine race/ethnicity.

If you are Hispanic, what is your Hispanic background?

- (A) I am not Hispanic.
- (B) Mexican, Mexican American, or Chicano
- (C) Puerto Rican
- (D) Cuban
- (E) Other Spanish or Hispanic background

For the question above, students who responded by filling in the second, third, fourth, or fifth oval were considered Hispanic. For students who filled in the first oval, did not respond to the question, or provided information that could not be classified, responses to the following question were examined to determine their race/ethnicity.

Which best describes you?

- (A) White (not Hispanic)
- (B) Black (not Hispanic)
- (C) Hispanic ("Hispanic" means someone who is from a Mexican, Mexican American, Chicano, Puerto Rican, Cuban, or other Spanish or Hispanic background.)
- (D) Asian ("Asian" means someone who is from a Chinese, Japanese, Vietnamese, or other Asian background.)
- (E) Pacific Islander ("Pacific Islander" means someone who is from a Filipino, Hawaiian, or other Pacific Island background.)
- (F) American Indian or Alaskan Native ("American Indian or Alaskan Native" means someone who is from one of the American Indian tribes, or one of the original people of Alaska.)
- (G) Other

Students' race/ethnicity was then assigned on the basis of their responses. For the question above, students who filled in the seventh oval ("Other"), or who did not respond at all, race/ethnicity was assigned as determined by school records.

Race/ethnicity could not be determined for students who did not respond to either of the demographic questions and whose schools did not provide information about race/ethnicity.

Details of how race/ethnicity classifications were derived are presented so that readers can determine how useful the results are for their particular purposes. Also, some students indicated that they were from a Hispanic background (e.g., Puerto Rican or Cuban) and that a racial/ethnic category other than Hispanic best described them. These students were classified as Hispanic based on the rules described above.

Parents' Highest Level of Education

The variable representing the level of parental education is derived from responses to two questions from the set of general student background questions. Students were asked to indicate the extent of their mother's education.

How much education did your mother receive? ("Mother" can be a mother, stepmother, or female guardian.)

- (A) She did not finish high school.
- (B) She graduated from high school.
- (C) She had some education after high school.
- (D) She graduated from college.

Students were asked a similar question about their father's education level.

How much education did your father receive? ("Father" can be a father, stepfather, or male guardian.)

- (A) He did not finish high school.
- (B) He graduated from high school.
- (C) He had some education after high school.
- (D) He graduated from college.

The information was combined into one parental education reporting variable through the following process. If a student indicated the extent of education for only one parent, that level was included in the data. If a student indicated the extent of education for both parents, the higher of the two levels was included in the data. If the student did not respond for either parent, the student was recorded as having provided no response.

Guidelines for Analysis and Reporting

This report describes performance of eighth graders and examines the results for various groups of students within this population (e.g., those who have certain demographic characteristics or who responded to a specific background question in a particular way). It also examines the results for individual demographic groups and individual background questions. However, it does not include an analysis of the relationships among combinations of these subpopulations or background questions.

Estimating Variability

The statistics presented in this report are estimates of group and subgroup performance based on samples of students, rather than the values that could be calculated if every student in the nation answered every assessment question. It is therefore important to have measures of the degree of uncertainty of the estimates. Accordingly, in addition to providing estimates of percentages of students and their average scale score, this report provides information about the uncertainty of each statistic.

Two components of uncertainty are accounted for in the variability of statistics based on IRT scale or mean percent correct scores: the uncertainty due to sampling only a small number of students relative to the whole population and the uncertainty due to sampling only a relatively small number of questions. The variability of estimates of percentages of students having certain background characteristics or answering a certain cognitive question correctly is accounted for by the first component alone. Because NAEP uses complex sampling procedures, conventional formulas for estimating sampling variability that assume simple random sampling are inappropriate. For this reason, NAEP uses a jackknife replication procedure to estimate standard errors. The jackknife standard error provides a reasonable measure of uncertainty for any information about students that can be observed without error, but each student typically responds to so few questions within any content area that the scale score for any single student would be imprecise. In this case, using plausible values technology makes it possible to describe the performance of groups and subgroups of students, but the underlying imprecision that makes this step necessary adds an additional component of variability to statistics based on NAEP scale scores.[10]

The reader is reminded that, like those from all surveys, NAEP results are also subject to other kinds of errors including the effects of necessarily imperfect adjustments for student and school nonresponse and other largely unknowable effects associated with the particular instrumentation and data collection methods used. Nonsampling errors can be attributed to a number of sources: inability to obtain complete information about all selected students in all selected schools in the sample (some students or schools refused to participate; some students participated but answered only certain questions); ambiguous definitions; differences in interpreting questions; inability or unwillingness to give correct information; mistakes in recording, coding, or scoring data; and other errors of collecting, processing, sampling, and estimating missing data. The extent of nonsampling errors is difficult to estimate. By their nature, the impacts of nonsampling errors cannot be reflected in the data-based estimates of uncertainty provided in NAEP reports.

Drawing Inferences from the Results

The use of confidence intervals, based on the standard errors, provides a way to make inferences about the population averages and percentages in a manner that reflects the uncertainty associated with the sample estimates. An estimated sample scale score average ± 2 standard errors represents about a 95-percent confidence interval for the corresponding population

10 For further details, see Johnson, E.G. & Rust, K.F. (1992). Population inferences and variance estimation for NAEP data. *Journal of Educational Statistics*, 17(2), 175-190.

quantity. This means that with 95-percent certainty, the average performance of the entire population of interest is within about ± 2 standard errors of the sample average.

As an example, suppose that the average theatre Responding scale score of students in a particular group was 256, with a standard error of 1.2. A 95-percent confidence interval for the population quantity would be as follows:

Average ± 2 standard errors
= 256 ± 2 (1.2)
= 256 ± 2.4
= (256 - 2.4, 256 + 2.4)
= (253.6, 258.4)

Thus, one can conclude with close to 95-percent certainty that the average scale score for the entire population of students in that group is between 253.6 and 258.4.

Similar confidence intervals can be constructed for percentages, provided that the percentages are not extremely large or extremely small. For percentages, confidence intervals constructed in the above manner work best when sample sizes are large, and the percentages being tested have magnitude relatively close to 50 percent. Statements about group differences should be interpreted with caution if at least one of the groups being compared is small in size and/or if "extreme" percentages are being compared. For reporting purposes, groups' percentages, P, were treated as "extreme" if:

$$P < P_{lim} = \frac{200}{N_{EFF} + 2},$$

where the effective sample size,

$$N_{EFF} = \frac{P(100 - P)}{(SE)^2},$$

and SE is the jackknife standard error of P. This "rule of thumb" cutoff leads to flagging a large proportion of confidence intervals that would otherwise include values < 0 or > 1. Similarly, at the other end of the 0 - 100 scale, a percentage is deemed extreme if (100 - P) < P_{lim}. In either extreme case, the confidence intervals described above are not appropriate, and procedures for obtaining accurate confidence intervals are quite complicated. In this case, the value of P was reported, but no standard error was estimated and hence no tests were conducted. This rule was not applied to response percentages within items.

As for percentages, confidence intervals for average scale scores are most accurate when sample sizes are large. For some of the subgroups of students for which average scale scores or percentages were reported, student sample sizes could be quite small. For results to be reported for any subgroup, a minimum student sample size of 62 was required. If students in a particular subgroup were clustered within a small number of geographic primary sampling units (PSUs), the estimates of the standard errors might also be inaccurate. So, subgroup data were required to come from a minimum of five PSUs.

Analyzing Group Differences in Averages and Percentages

To determine whether there is a real difference between the average scale score (or percentage of a certain attribute) for two groups in the population, one needs to obtain an estimate of the degree of uncertainty associated with the difference between the average scale scores or percentages of these groups for the sample. This estimate of the degree of uncertainty, called the standard error of the difference between the groups, is obtained by squaring each group's standard error, summing these squared standard errors, and then taking the square root of this sum.

If zero is within the confidence interval for the differences there is no statistically significant difference between the groups. The multiplier is the .975(1-.025) percentile from a T-distribution with the degrees of freedom that vary by the values of the average scale scores, their standard errors, and the number of PSUs that contribute to the average scale

scores. (See the forthcoming *1997 NAEP Arts Analysis Technical Report* for more details.) This procedure produces a conservative estimate of the standard error of the difference, since the estimates of the group averages or percentages will be positively correlated to an unknown extent due to the sampling plan. Direct estimation of the standard errors of all reported differences would involve a heavy computational burden.

Sometimes a group of related comparisons are made, such as comparing the average scale scores for a particular region with those from another region for specific groups of students. If one wants to hold the certainty level for a specific set of comparisons at a particular level (e.g., 95-percent), adjustments (called multiple-comparisons procedures) need to be made. One such procedure, the Bonferroni method, was used to form confidence intervals for the differences for sets of comparisons. The set of comparisons is referred to as a "family," and the typical family involves all subgroups related by a certain background question.[11]

Multiple-comparisons procedures, like the Bonferroni method, are useful for controlling the overall Type I error rate for a defined set of hypothesis tests. However, especially when the number of potential comparisons which could be made is large, as in NAEP data, this protection comes at the substantial loss of power in detecting specific consistent patterns in the data. For example, more powerful and complex tests of significance designed to identify consistent patterns in the data might judge that two groups were significantly different when a Bonferroni multiple-comparisons procedure would not.

These tests do not control the overall Type I error rate when they are applied to several related subgroups, such as the students in each region of the country. For this reason, the Bonferroni method for controlling Type I error was used when related subgroups were tested. For example, when tests were conducted for means or percentages for the separate race/ethnicity groups (e.g., White, Black, and Hispanic) these tests were treated as a single family of comparisons of size 3. The significance level for each of the separate tests was adjusted by the Bonferroni procedure to yield a Type I error rate of .05 for the family of comparisons.

11 Miller, R.G. (1996). *Simultaneous statistical inference*. New York: Wiley.

Appendix B

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Appendix B

Standard Errors

The comparisons presented in this report are based on statistical tests that consider the magnitude of the difference between group averages or percentages and the standard errors of those statistics. This appendix contains the standard errors for the averages and percentages discussed in Chapters 2, 3, 4, 6 and 7.

Figure

B2.7 Standard Errors for Music Responding Profile of Percentages of Students in Lower, Middle and Upper Levels of the Responding Scale, by Selected In- and Out-of-School Activities. 200

B2.8 Standard Errors for Creating Mean for Lower, Middle, and Upper Responding Score Groups. 200

B2.9 Standard Errors for Performing Mean for Lower, Middle, and Upper Responding Score Groups. 200

Table

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B2.1 Standard Errors for Results on Individual Scoring Guides by Performance Medium

B2.2 Standard Errors for Results on Individual Scoring Guides by Solo Difficulty Level

B2.3 Standard Errors for Percent of Students Receiving Given Scores for Pitch by Performance Medium

B2.4 Standard Errors for Percent of Students Receiving Given Scores for Rhythm by Performance Medium

B2.5 Standard Errors for Percent of Students Receiving Given Scores for Dynamics by Performance Medium

B2.6 Standard Errors for Percent of Students Receiving Given Scores for Articulation by Performance Medium

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B3.7 Standard Errors for Theatre Responding Profile of Percentages of Students in Lower, Middle, and Upper Levels of the Responding Scale, by Selected In- and Out-of-School Activities..... 203

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Table

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B4.4 Standard Errors for Percentages of Students and Average Creating Scores by Students' Reports on the Frequency With Which They Engage in Various Visual Art Activities . . 205

B4.5 Standard Errors for Percentages of Students and Average Creating Scores by Students' Reports on Their Involvement in Various Out-of-School Activities. 205

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B6.4 Percentages and Standard Errors for Average Music Scores by Gender. 206

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B6.6 Percentages and Standard Errors for Average Theatre Scores by Gender. 207

B6.7 Percentages and Standard Errors for Average Music Scores by Race/Ethnicity. 207

B6.8 Percentages and Standard Errors for Average Visual Arts Scores by Race/Ethnicity 207

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Figure B2.7 **Standard Errors for Music Responding Profile of Percentages of Students in Lower, Middle and Upper Levels of the Responding Scale, by Selected In- and Out-of-School Activities**

Percentages of Students Reporting on Each Activity

In-School Student Activities	Lower Level of the Scale	Middle Level of the Scale	Upper Level of the Scale
Play in a band	1.1	1.1	2.4
Play in an orchestra	0.6	0.6	1.2
Sing in a chorus or choir	1.5	2.4	4.3
Take private singing lessons	0.6	0.3	1.0
Take private lessons on an instrument	0.9	0.7	2.3
Own a musical instrument	2.1	1.4	2.0
Go with class to 3 or more concerts in the past year	1.3	1.4	2.9
Out-of-School Student Activities			
Play a musical instrument	1.3	1.8	2.7
Play with a group, band, or orchestra	1.4	1.0	2.0
Sing in a group, chorus or choir	1.5	1.4	2.0
Take private lessons on a musical instrument or in singing	0.7	0.7	2.3
Listen to musical tapes, CDs, or records	1.9	0.8	0.9
Talk with family or friends about music	2.1	1.7	3.1

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Figure B2.8 **Standard Errors for Creating Mean for Lower, Middle, and Upper Responding Score Groups**

Lower	1.8
Middle	1.1
Upper	1.4

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Figure B2.9 **Standard Errors for Performing Mean for Lower, Middle, and Upper Responding Score Groups**

Lower	1.4
Middle	1.2
Upper	2.8

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Standard Error Tables for Tables 2.1 through 2.6 are found on the CD-ROM version of this report.

Table B2.7 **Standard Errors for Percentages of Students and Their Performing Scores by Students' Involvement in Various In-School Music Activities**

When you take music class in school, how often does your teacher do each of the following things?	Almost Every Day	Once or Twice a Week	Once or Twice a Month	Never or Hardly Ever	I Don't Have Music
Play Music for You to Listen to					
Percentage of Students	1.3	1.0	0.8	0.9	2.0
Average Performing Score	1.7	2.8	2.9	2.7	1.7
Ask You to Sing					
Percentage of Students	1.2	1.1	0.6	1.4	1.9
Average Performing Score	1.9	2.5	3.3	1.8	1.8
Ask You to Play Instruments					
Percentage of Students	1.5	0.7	0.8	1.7	2.1
Average Performing Score	2.9	3.8	4.3	1.7	1.7

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B2.8 **Standard Errors for Percentages of Students and Their Creating Scores by Students' Involvement in Various In-School Music Activities**

When you take music class in school, how often does your teacher do each of the following things?	Almost Every Day	Once or Twice a Week	Once or Twice a Month	Never or Hardly Ever	I Don't Have Music
Play Music for You to Listen to					
Percentage of Students	1.3	1.0	0.8	0.9	2.0
Average Creating Score	1.8	2.0	1.8	2.1	1.4
Ask You to Sing					
Percentage of Students	1.2	1.1	0.6	1.4	1.9
Average Creating Score	2.3	2.0	2.8	1.6	1.3
Ask You to Play Instruments					
Percentage of Students	1.5	0.7	0.8	1.7	2.1
Average Creating Score	1.5	2.9	2.4	1.8	1.4
Ask You to Write Down Music					
Percentage of Students	0.6	1.0	0.9	1.4	2.1
Average Creating Score	4.1	2.1	2.2	1.5	1.3
Ask You to Make up Your Own Music					
Percentage of Students	0.4	0.5	0.8	1.9	2.0
Average Creating Score	3.9	2.7	2.1	1.5	1.3

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B2.9 Standard Errors for Percentages of Students and Their Performing and Creating Scores by Students' Involvement in Various In-School Music Activities

Which of the following activities do you do in school?	Play in a Band		Play in an Orchestra		Sing in a Chorus or Choir	
	Yes	No	Yes	No	Yes	No
Percentage of Students	1.2	1.2	0.5	0.5	2.2	2.2
Average Performing Scores	2.4	1.3	–	1.2	1.8	1.3
Average Creating Scores	1.7	1.3	2.8	1.1	1.7	1.1

NOTE: – Standard errors cannot be accurately determined.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B2.10 Standard Errors for Percentages of Students and Their Performing and Creating Scores by Students' Involvement in Various Out-of-School Music Activities

Which of the following things do you do outside of school?	Take Private Lessons on a Musical Instrument or in Singing		Listen to a Musical Tape, CD, or Record		Read a Book About Music	
	Yes	No	Yes	No	Yes	No
Percentage of Students	0.9	0.9	0.7	0.7	0.7	0.7
Average Performing Scores	3.0	1.2	1.3	2.6	2.6	1.1
Average Creating Scores	2.0	1.1	1.1	2.3	2.2	1.1

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B2.11 Standard Errors for Percentages of Students and Their Performing and Creating Scores by Students' In-School Experiences

	In the last year, how many times did you go with your class to a concert?			Have you ever listened to a musical performance at school?	
	None	1 or 2 times	3 or more times	Yes	No
Percentage of Students	2.1	1.4	1.4	1.2	1.2
Average Performing Scores	1.5	1.8	2.2	1.2	1.7
Average Creating Scores	1.3	1.3	2.6	1.2	1.4

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Figure B3.7 **Standard Errors for Theatre Responding Profile of Percentages of Students in Lower, Middle and Upper Levels of the Responding Scale, by Selected In- and Out-of-School Activities**

Percentages of Students Reporting on Each Activity			
In-School Student Activities	**Lower Level of the Scale**	**Middle Level of the Scale**	**Upper Level of the Scale**
Acted in live theatre productions	6.8	4.7	3.2
Received classroom instruction in acting	6.0	2.6	1.2
Were involved in technical theatre work for live productions	4.9	4.6	5.6
Received classroom instruction in technical theatre (such as costume design, makeup, lighting, scenery, props)	4.4	4.8	4.7
Received classroom instruction in making films or video	6.2	3.3	5.8
Received classroom instruction in directing	4.4	2.8	4.6
Received classroom instruction in playwriting	4.5	4.6	7.3
Out-of-School Student Activities			
Wrote plays or scripts	2.6	2.8	2.9
Went to plays, musicals, or puppet shows	4.0	5.1	3.8

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Figure B3.8 **Standard Errors for Creating/Performing Mean for Lower, Middle, and Upper Responding Score Groups**

Lower	1.9
Middle	1.4
Upper	1.3

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B3.1 **Standard Errors for Students' Reports and Creating/Performing Scores by Various Tasks Done in Theatre Productions**

If you have been involved in live theatre productions productions in school, which activities have you done?	% Students		Average Creating/ Performing Score (0–100%)	
	Yes	No, Other Activity	Yes	No, Other Activity
Acting	4.7	1.5	1.5	3.0
Technical work	3.3	3.0	1.9	1.7
Directing	1.6	3.9	3.2	1.7
Writing a play or script	3.2	5.3	1.9	1.8
I have not been involved	4.1	-	2.1	-

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B3.2 **Standard Errors for Students' Reports and Creating/Performing Scores by Classroom Instruction for Various Theatre Activities**

Have you ever had classroom instruction in school in the following activities?	% Students		Average Creating/ Performing Score (0–100%)	
	Yes	No, Other Activity	Yes	No, Other Activity
Making a film or video	4.3	4.2	1.9	1.9
Acting	3.9	2.2	1.6	3.2
Directing	2.4	2.7	2.0	1.9
Playwriting	4.0	4.2	1.8	2.1
Technical theatre	3.7	3.5	1.8	1.8
None of the above	2.4	-	2.6	-

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B3.3 Standard Errors for Students' Reports and Creating/Performing Scores by the Frequency With Which They Engage in Various Theatre Activities

How often are you asked to do the following things in school?	At Least Once or Twice a Week	Once or Twice a Month	Never or Hardly Ever
Play roles			
Percentage of Students' Responses	3.8	2.1	4.2
Average Creating/Performing Score	1.9	1.9	2.2
Read a play or scene aloud			
Percentage of Students' Responses	3.1	2.0	2.8
Average Creating/Performing Score	2.3	1.8	2.6
Improvise scenes			
Percentage of Students' Responses	3.0	1.5	3.6
Average Creating/Performing Score	1.7	1.9	2.4
Write a play or scene			
Percentage of Students' Responses	2.0	2.6	2.6
Average Creating/Performing Score	2.1	1.9	2.3
Do technical theatre			
Percentage of Students' Responses	1.8	2.2	3.3
Average Creating/Performing Score	3.1	2.2	2.0
Perform for an audience			
Percentage of Students' Responses	3.6	2.3	3.4
Average Creating/Performing Score	1.6	1.9	2.3

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B3.5 Standard Errors for Students' Reports and Creating/Performing Scores by Out-of-School Theatre Activities

When you are NOT in school, do you ever do the following things, NOT in connection with your schoolwork?	% Students		Average Creating/Performing Score (0-100%)	
	Yes	No, Other Activity	Yes	No, Other Activity
Go to a play, musical, or puppet show	3.8	1.8	2.1	1.4
Take acting or drama classes	2.0	3.8	2.0	1.8
Write a play or script	1.9	2.5	1.7	2.0
None	3.9	-	2.0	-

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B3.4 Standard Errors for Students' Reports and Creating/Performing Scores by In-School Theatre Activities

Did either you or your teacher save your acting or drama work in a portfolio or on tape or videotape?	% Students		Average Creating/Performing Score (0-100%)	
	Yes	No	Yes	No
	4.7	4.7	2.0	2.3

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Figure B4.7 Standard Errors for Visual Arts Responding Profile of Percentages of Students in Lower, Middle, and Upper Levels of the Responding Scale, by Selected In- and Out-of-School Activities

Percentages of Students Reporting on Each Activity

In-School Student Activities	Lower Level of the Scale	Middle Level of the Scale	Upper Level of the Scale
Took visual arts that year	3.5	2.7	3.6
Painted or drew at least once a week	2.4	1.7	1.9
Made things out of clay or other materials at least once a week	1.3	1.0	1.4
Wrote about their artwork at least once a week	1.2	1.0	0.8
Looked at videotapes, filmstrips, slides, or television programs about art	1.6	1.3	1.6
Saved (or teacher saved) artwork in school portfolio	2.3	2.0	2.3
Illustrated work in other subjects	2.8	1.5	2.1
Out-of-School Student Activities			
Made artwork on their own	2.1	1.8	2.1
Went to art museums or exhibits on their own	1.4	0.9	2.0

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Figure B4.8 Standard Errors for Creating Mean for Lower, Middle, and Upper Responding Score Groups

Lower	1.0
Middle	0.7
Upper	1.0

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B4.1 Standard Errors for Percentages of Students and Average Creating Scores by Students' Involvement in Various In-School Art Activities

	% Students		Creating Score (0–100%)	
	Yes	No	Yes	No
Are you taking an art course now, or have you taken an art course this year?	2.7	2.7	0.8	0.9
In school, do you ever illustrate your work in other subjects?	1.3	1.3	0.7	0.8
Do either you or your teacher save your artwork in a portfolio?	1.7	1.7	0.7	0.8

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B4.2 Standard Errors for Percentages of Students and Average Creating Scores by Frequency of Exhibiting Artwork

How often does your teacher have you show your artwork in an exhibit?	% Students	Creating Score (0–100%)
Once or twice a month	1.0	1.1
Once or twice a year	1.0	0.9
Never or hardly ever	1.5	0.7

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B4.3 Standard Errors for Percentages of Students and Average Creating Scores by Frequency of Visits to Art Museums, Galleries, or Exhibits

In the last year, how many times did you go with your class to an art museum, gallery, or exhibit?	% Students	Creating Score (0–100%)
3 or more times	0.3	–
1 or 2 times	1.4	1.2
None	1.4	0.7

NOTE: – Sample size is insufficient to provide a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B4.5 Standard Errors for Percentages of Students and Average Creating Scores by Students' Reports on Their Involvement in Various Out-of-School Art Activities

When you are NOT in school, do you ever do the following things on your own, NOT in connection with schoolwork?	% Students		Creating Score (0–100%)	
	Yes	No, Other Activity	Yes	No, Other Activity
Go to an art museum or exhibit	0.8	1.1	1.1	0.7
Make artwork	1.3	0.7	0.8	1.4
Keep an art journal or sketchbook	1.1	0.9	1.0	0.7
None	1.2	–	0.8	–

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B4.4 Standard Errors for Percentages of Students and Average Creating Scores by Students' Reports on the Frequency With Which They Engage in Various Visual Art Activities

When you have art in school, how often does your teacher have you do the following things?	% Students			Creating Score (0–100%)		
	At Least Once a Week	Once a Month	Never or Hardly Ever	At Least Once a Week	Once a Month	Never or Hardly Ever
Paint or draw	1.4	0.8	1.3	0.7	0.9	1.0
Make things out of clay or other materials	0.8	1.3	1.7	1.1	0.9	0.6
Talk with others about your artwork or that of other students	1.0	0.9	1.4	0.8	1.2	0.6
Write about your artwork	0.7	0.5	0.9	1.4	1.3	0.7
Look at videotapes, filmstrips, slides, or television programs about art	1.1	1.2	1.5	1.3	0.8	0.7
Work with a camera, computer, or Xerox to make artwork	1.1	0.8	1.4	1.0	1.1	0.6

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.1 Percentages and Standard Errors for Average Music Scores by Region

Region	Average Creating Score (0–100%)	Average Performing Score (0–100%)	Average Responding Scale Score (0–300)
Nation	1.1	1.2	1.3
Northeast	2.0 21 (2.2)	2.6 21 (3.3)	4.0 20 (2.1)
Southeast	2.7 23 (3.1)	2.4 21 (4.9)	2.7 26 (3.1)
Central	1.4 26 (1.8)	2.1 28 (4.0)	3.0 25 (1.8)
West	2.3 30 (2.8)	2.9 29 (4.1)	3.0 29 (2.8)

NOTE: Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.2 Percentages and Standard Errors for Average Visual Arts Scores by Region

Region	Average Creating Score (0–100%)	Average Responding Scale Score (0–300)
Nation	0.7	1.1
Northeast	1.5 20 (2.0)	4.0 20 (2.0)
Southeast	1.0 25 (3.6)	3.3 25 (3.5)
Central	1.8 23 (1.4)	3.5 23 (1.3)
West	1.3 32 (3.4)	2.6 32 (3.3)

NOTE: Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.3 Percentages and Standard Errors for Average Theatre Scores by Region

Region	Average Creating/ Performing Score (0–100%)	Average Responding Scale Score (0–300)
Nation	2.0	5.7
Northeast	– 7 (3.4)	– 7 (3.4)
Southeast	– 19 (10.3)	– 19 (10.3)
Central	– 3 (2.2)	– 3 (2.2)
West	2.1 71 (11.2)	5.3 71 (11.2)

NOTES: – Standard errors cannot be accurately determined.
Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.4 Percentages and Standard Errors for Average Music Scores by Gender

Gender	Average Creating Score (0–100%)	Average Performing Score (0–100%)	Average Responding Scale Score (0–300)
All Students	1.1	1.2	1.3
Male	1.0 50 (1.2)	1.4 49 (1.5)	1.5 50 (1.2)
Female	1.6 50 (1.2)	1.5 51 (1.5)	1.6 50 (1.2)

NOTE: Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.5 Percentages and Standard Errors for Average Visual Arts Scores by Gender

Gender	Average Creating Score (0–100%)	Average Responding Scale Score (0–300)
All Students	0.7	1.1
Male	0.7 51 (1.1)	1.5 51 (1.2)
Female	0.9 49 (1.1)	1.4 49 (1.2)

NOTE: Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.6 Percentages and Standard Errors for Average Theatre Scores by Gender

Gender	Average Creating/ Performing Score (0–100%)	Average Responding Scale Score (0–300)
All Students	2.0	5.7
Male	2.2 45 (3.1)	6.6 45 (3.1)
Female	2.1 55 (3.1)	5.6 55 (3.1)

NOTE: Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.7 Percentages and Standard Errors for Average Music Scores by Race/Ethnicity

	Average Creating Score (0–100%)	Average Performing Score (0–100%)	Average Responding Scale Score (0–300)
All Students	1.1	1.2	1.3
Students who indicated their Race/Ethnicity as ...			
White	1.2 69 (0.5)	1.4 71 (2.5)	1.4 69 (0.4)
Black	3.6 14 (0.4)	1.9 13 (1.8)	2.3 14 (0.3)
Hispanic	2.7 13 (0.4)	3.7 12 (1.5)	3.5 12 (0.2)
Asian	3.8 3 (0.3)	–	6.2 3 (0.2)
Pacific Islander	– 1 (0.3)	–	– 1 (0.2)
American Indian	–	–	–

NOTES: – Standard errors cannot be accurately determined.

Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.8 Percentages and Standard Errors for Average Visual Arts Scores by Race/Ethnicity

	Average Creating Score (0–100%)	Average Responding Scale Score (0–300)
All Students	0.7	1.1
Students who indicated their Race/Ethnicity as ...		
White	0.9 69 (0.3)	1.3 69 (0.3)
Black	1.8 14 (0.3)	2.0 14 (0.3)
Hispanic	1.3 12 (0.2)	2.0 12 (0.2)
Asian	1.6 3 (0.3)	6.4 3 (0.3)
Pacific Islander	–	–
American Indian	–	–

NOTES: – Standard errors cannot be accurately determined.

Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.9 **Percentages and Standard Errors for Average Theatre Scores by Race/Ethnicity**

	Average Creating/ Performing Score (0–100%)	Average Responding Scale Score (0–300)
All Students	2.0	5.7
Students who indicated their Race/Ethnicity as ...		
White	1.9 65 (6.4)	4.4 65 (6.4)
Black	2.2 16 (6.1)	10.1 16 (6.1)
Hispanic	2.5 12 (2.6)	6.2 12 (2.6)
Asian	–	–
Pacific Islander	–	–
American Indian	–	–

NOTES: – Standard errors cannot be accurately determined.
Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.10 **Percentages and Standard Errors for Average Music Scores by Type of School Attended**

	Average Creating Score (0–100%)	Average Performing Score (0–100%)	Average Responding Scale Score (0–300)
All Students	1.1	1.2	1.3
Students who attend ...			
Public Schools	1.2 89 (2.7)	1.2 91 (3.4)	1.4 89 (2.7)
Nonpublic Schools	2.9 11 (2.7)	4.7 9 (3.4)	5.8 11 (2.7)

NOTE: Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.11 **Percentages and Standard Errors for Average Visual Arts Scores by Type of School Attended**

	Average Creating Score (0–100%)	Average Responding Scale Score (0–300)
All Students	0.7	1.1
Students who attend ...		
Public Schools	0.8 89 (2.8)	1.1 89 (2.7)
Nonpublic Schools	1.6 11 (2.8)	3.7 11 (2.7)

NOTE: Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.12 Percentages and Standard Errors for Average Theatre Scores by Type of School Attended

	Average Creating/ Performing Score (0–100%)	Average Responding Scale Score (0–300)
All Students	2.0	5.7
Students who attend ...		
Public Schools	2.1 86 (–)	4.9 86 (–)
Nonpublic Schools	– 14 (–)	– 14 (–)

NOTES: – Standard errors cannot be accurately determined.
Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.13 Percentages and Standard Errors for Average Music Scores by Parents' Highest Education Level

	Average Creating Score (0–100%)	Average Performing Score (0–100%)	Average Responding Scale Score (0–300)
All Students	1.1	1.2	1.3
Students who reported their parents' highest level of education as ...			
Did Not Finish High School	2.5 8 (0.9)	2.4 7 (1.4)	3.5 8 (0.8)
Graduated from High School	2.0 22 (1.4)	2.4 23 (1.8)	1.3 22 (1.3)
Some Education after High School	1.3 22 (0.2)	2.4 24 (1.4)	1.8 22 (1.1)
Graduated from College	1.3 48 (1.8)	1.5 46 (2.1)	1.7 48 (1.8)

NOTE: Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.14 Percentages and Standard Errors for Average Visual Arts Scores by Parents' Highest Education Level

	Average Creating Score (0–100%)	Average Responding Scale Score (0–300)
All Students	0.7	1.1
Students who reported their parents' highest level of education as ...		
Did Not Finish High School	1.4 7 (0.5)	2.4 7 (0.5)
Graduated from High School	1.1 23 (1.3)	1.8 23 (1.3)
Some Education after High School	0.8 23 (1.1)	1.8 23 (1.1)
Graduated from College	0.7 48 (1.8)	1.4 48 (1.8)

NOTE: Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B6.15 Percentages and Standard Errors for Average Theatre Scores by Parents' Highest Education Level

	Average Creating/ Performing Score (0–100%)	Average Responding Scale Score (0–300)
All Students	2.0	5.7
Students who reported their parents' highest level of education as ...		
Did Not Finish High School	2.1 7 (0.9)	4.4 7 (0.9)
Graduated from High School	1.9 18 (2.8)	8.5 18 (2.8)
Some Education after High School	1.8 20 (2.8)	5.1 20 (2.8)
Graduated from College	2.2 55 (4.5)	5.6 55 (4.5)

NOTE: Below the standard error for each scale score, the corresponding percentage of students and its standard error are presented.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.2 Standard Errors for Schools' Reports on Various Percentages of Students Receiving Arts Instruction

During this year, what percentage of eighth graders received instruction in the following arts in your school?	PERCENT OF STUDENTS					
	0–10%	11–20%	21–40%	41–60%	61–80%	81–100%
Dance						
Percentage of Students	3.3	1.4	2.0	–	–	2.6
Music						
Percentage of Students	3.0	3.3	5.3	4.2	3.1	5.3
Responding Scale Score	4.9	6.7	3.2	3.2	7.3	3.1
Average Creating Score	9.1	2.5	2.9	2.6	4.5	1.8
Average Performing Score	–	4.3	1.7	4.5	2.8	1.9
Theatre						
Percentage of Students	4.8	3.9	3.3	2.4	1.7	2.2
Visual Arts						
Percentage of Students	2.7	1.8	3.6	3.0	4.3	4.3
Responding Scale Score	5.5	6.3	3.9	2.8	6.7	2.6
Average Creating Score	2.1	1.8	2.1	1.4	2.3	0.9

NOTES: Data reported in this table for Dance, Theatre, and Visual Arts are taken from the Visual Arts sample. Music data are taken from the Music sample.

– Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.1 Standard Errors for Schools' Reports on the Frequency With Which Their Students Receive Instruction in the Arts

How often does a typical eighth-grade student in your school receive instruction in each of the following subjects?	At Least 3 or 4 Times a Week	Once or Twice a Week	Less than Once a Week	Subject not Taught
Dance				
Percentage of Students	1.6	1.8	3.2	4.2
Music				
Percentage of Students	5.9	6.0	3.5	3.4
Responding Scale Score	3.0	3.2	4.2	7.9
Average Creating Score	2.0	1.6	1.7	4.3
Average Performing Score	2.2	1.7	1.9	–
Theatre				
Percentage of Students	3.0	2.5	2.6	4.3
Visual Arts				
Percentage of Students	5.7	3.6	2.2	4.1
Responding Scale Score	2.3	3.2	4.6	4.7
Average Creating Score	1.3	1.3	1.2	2.1

NOTES: Data reported in this table for Dance, Theatre, and Visual Arts are taken from the Visual Arts sample. Music data are taken from the Music sample.

– Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.3 Standard Errors for Schools' Reports on District or State Arts Curriculum Requirement

Does your district or state have a curriculum in any of the following subject areas that your school is expected to follow?	Yes	No
Dance		
Percentage of Students	3.3	3.3
Music		
Percentage of Students	5.5	5.5
Responding Scale Score	1.7	3.5
Average Creating Score	1.2	2.3
Average Performing Score	1.4	2.6
Theatre		
Percentage of Students	3.8	3.8
Visual Arts		
Percentage of Students	5.4	5.4
Responding Scale Score	1.6	2.2
Average Creating Score	1.0	1.1

NOTE: Data reported in this table for Dance, Theatre, and Visual Arts are taken from the Visual Arts sample. Music data are taken from the Music sample.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.4 Standard Errors for Schools' Reports on Whether They Use Visiting Artists

In the last year, did your school bring in visiting artists to perform, demonstrate, or teach in any of the following areas?	Yes	No
Dance		
Percentage of Students	4.4	4.4
Music		
Percentage of Students	5.7	5.7
Responding Scale Score	2.5	2.0
Average Creating Score	1.5	1.7
Average Performing Score	1.8	1.2
Theatre		
Percentage of Students	4.8	4.8
Visual Arts		
Percentage of Students	5.3	5.3
Responding Scale Score	3.7	1.9
Average Creating Score	1.0	1.0

NOTE: Data reported in this table for Dance, Theatre, and Visual Arts are taken from the Visual Arts sample. Music data are taken from the Music sample.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.5 Standard Errors for Schools' Reports on Whether They Sponsor an Artist-in-the-Schools Program

In the last year, did your school sponsor a visiting artist program (such as an Artist-in-the-Schools program) in any of the following areas?	Yes	No
Dance		
Percentage of Students	2.7	2.7
Music		
Percentage of Students	5.1	5.1
Responding Scale Score	5.0	1.7
Average Creating Score	2.2	1.3
Average Performing Score	3.4	1.3
Theatre		
Percentage of Students	3.2	3.2
Visual Arts		
Percentage of Students	4.6	4.6
Responding Scale Score	5.3	1.5
Average Creating Score	1.2	0.8

NOTE: Data reported in this table for Dance, Theatre, and Visual Arts are taken from the Visual Arts sample. Music data are taken from the Music sample.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.6 Standard Errors for Schools' Reports on Who Teaches Eighth Graders in Dance

What is the position of the person(s) on your staff who teach dance to eighth graders?	% Students Yes	No
Full-time specialist	0.9	0.9
Part-time specialist	2.3	2.3
Physical education teacher	3.6	3.6
Elementary classroom teacher	–	–
Other faculty member	2.1	2.1
Artist-in-residence	1.6	1.6
Volunteer	2.3	2.3
Dance is not taught.	3.6	3.6

NOTES: Data reported in this table for Dance are taken from the Visual Arts sample.

– Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.7 Standard Errors for Schools' Reports on Who Teaches Eighth Graders in Music

What is the position of the person(s) on your staff who teach music to eighth graders?	% Students Yes	No	Responding Scale Score (0-300) Yes	No	Average Creating Score (0-100%) Yes	No	Average Performing Score (0-100%) Yes	No
Full-time specialist	4.8	4.8	1.8	4.3	1.4	2.3	1.2	3.1
Part-time specialist	3.4	3.4	4.5	1.6	2.5	1.5	3.3	1.1
Elementary classroom teacher	0.6	0.6	–	1.4	–	1.2	–	1.2
Other faculty member	1.5	1.5	–	1.4	–	1.2	–	1.2
Artist-in-residence	–	–	–	1.4	–	1.2	–	1.2
Volunteer	0.9	0.9	–	1.4	–	1.2	–	1.2
Music is not taught.	2.7	2.7	6.8	1.5	–	1.1	–	1.2

NOTES: Data reported in this table for Music are taken from the Music sample.

– Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.8 Standard Errors for Schools' Reports on Who Teaches Eighth Graders in Theatre

What is the position of the person(s) on your staff who teach theatre to eighth graders?	% Students	
	Yes	No
Full-time specialist	4.1	4.1
Part-time specialist	2.1	2.1
Elementary classroom teacher	1.7	1.7
Other faculty member	3.5	3.5
Artist-in-residence	2.0	2.0
Volunteer	1.8	1.8
Theatre is not taught.	5.7	5.7

NOTE: Data reported in this table for Theatre are taken from the Visual Arts sample.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.10 Standard Errors for Schools' Reports on the Space Where Dance is Taught

Which best describes the space for the teaching of dance in your school?	% Students
Dance studio with special dance equipment	–
Room(s) dedicated to dance teaching, without special equipment	–
Gymnasium, auditorium, or cafeteria	4.2
Classrooms only	1.7
Other	–
Dance is not taught.	4.7

NOTES: Data reported in this table for Dance are taken from the Visual Arts sample.

– Standard errors cannot be determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.9 Standard Errors for Schools' Reports on Who Teaches Eighth Graders in Visual Arts

What is the position of the person(s) on your staff who teach visual arts to eighth graders?	% Students		Responding Scale Score (0-300)		Average Creating Score (0-100%)	
	Yes	No	Yes	No	Yes	No
Full-time specialist	5.3	5.3	1.7	2.9	0.9	1.2
Part-time specialist	3.0	3.0	6.6	1.3	1.7	0.8
Elementary classroom teacher	2.2	2.2	4.2	1.1	1.4	0.7
Other faculty member	1.9	1.9	6.8	1.1	3.7	0.7
Artist-in-residence	–	–	–	1.1	–	0.7
Volunteer	–	–	–	1.1	–	0.7
Visual arts are not taught.	2.4	2.4	5.9	1.2	2.8	0.8

NOTES: Data reported in this table for Visual Arts are taken from the Visual Arts sample.

– Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.11 Standard Errors for Schools' Reports on the Space Where Music is Taught

Which best describes the space for the teaching and performing of music in your school?	% Students	Responding Scale Score (0-300)	Average Creating Score (0-100%)	Average Performing Score (0-100%)
Room(s) dedicated to music teaching, and stage	4.8	2.0	1.8	1.7
Room(s) dedicated to music teaching, no stage	5.4	2.8	1.7	2.0
Stage, no room dedicated to music teaching	1.7	6.6	4.1	2.7
Classrooms only	2.5	4.7	3.6	–
Other	1.1	–	–	–
Music is not taught.	1.1	–	–	–

NOTES: Data reported in this table for Music are taken from the Music sample.

– Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.12 Standard Errors for Schools' Reports on the Space Where Theatre is Taught

Which best describes the space for the teaching of theatre in your school?	% Students
Stage with special equipment (e.g., curtains, dressing rooms)	3.3
Stage without special equipment	2.5
Room(s) dedicated to theatre teaching	1.8
Gymnasium, auditorium, or cafeteria	3.4
Classrooms only	1.9
Other	–
Theatre is not taught.	5.0

NOTES: Data reported in this table for Theatre are taken from the Visual Arts sample.

– Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.13 Standard Errors for Schools' Reports on the Space Where Visual Arts is Taught

Which best describes the space for the teaching of visual arts in your school?	% Students	Responding Scale Score (0-300)	Average Creating Score (0-100%)
Art studio with special equipment	5.9	2.5	1.1
Room(s) dedicated to art but with no special equipment	4.8	3.0	1.2
Art-on-a-cart; no dedicated space	–	–	–
Classrooms only	1.8	6.4	1.4
Other	–	–	–
Visual arts are not taught.	2.5	8.2	2.0

NOTES: Data reported in this table for Visual Arts are taken from the Visual Arts sample.

– Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.14 Standard Errors for Selected Schools' Reports on the Frequency of Theatre Instruction

How often do eighth-grade students receive instruction in theatre?	% Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
At least three or four times a week	12.2	4.5	2.5
Once or twice a week	12.1	18.1	2.5
Less than once a week	–	–	–
Subject not taught	–	–	–

NOTE: – Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.15 Standard Errors for Selected Schools' Reports on the Percentages of Students Receiving Theatre Instruction

During this year, what percentage of eighth graders received instruction in theatre in your school?	% Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
0-10% of Students	4.4	9.1	2.7
11-20% of Students	7.2	11.3	1.4
21-40% of Students	11.3	7.6	4.9
41-60% of Students	–	–	–
61-80% of Students	8.3	–	–
81-100% of Students	–	–	–

NOTE: – Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.16 Standard Errors for Selected Schools' Reports on a District or State Theatre Curriculum

Does your district or state have a curriculum in theatre that your school is expected to follow?	% Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Yes	13.0	5.9	3.3
No	13.0	10.1	3.2

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.17 Standard Errors for Selected Schools' Reports on Bringing in Visiting Artists

In the last year, did your school bring in visiting artists to perform, demonstrate, or teach in theatre?	% Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Yes	9.2	9.3	3.4
No	9.2	4.1	2.3

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.18 Standard Errors for Selected Schools' Reports on Sponsoring a Visiting Artist Program

In the last year, did your school sponsor a visiting artist program (such as an Artist-in-the-Schools program) in theatre?	% Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Yes	9.6	8.8	4.9
No	9.6	6.7	2.3

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.19 Standard Errors for Selected Schools' Reports on the Positions of Theatre Teachers

What is the position of the person(s) on your staff who teach theatre to eighth graders?	% Students		Responding Scale Score (0-300)		Average Creating/ Performing Score (0-100%)	
	Yes	No	Yes	No	Yes	No
Full-time specialist	11.3	11.3	5.4	11.4	3.0	2.6
Part-time specialist	9.4	9.4	18.2	6.3	2.0	2.7
English or language arts teacher	–	–	–	5.6	–	2.1
Elementary classroom teacher	–	–	–	5.5	–	2.1
Other faculty member	11.2	11.2	–	5.1	–	2.3
Artist-in-residence	–	–	–	5.5	–	2.1
Volunteer	–	–	–	5.5	–	2.1
Theatre is not taught.	–	–	–	5.5	–	2.1

NOTE: – Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.20 Standard Errors for Selected Schools' Reports on the Space Available for Teaching Theatre

Which best describes the space for the teaching of theatre in your school?	% Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Stage with special equipment (e.g., curtains, dressing rooms)	7.4	6.6	2.7
Stage without special equipment	–	–	–
Room(s) dedicated to theatre teaching	11.4	5.2	3.4
Gymnasium, auditorium, or cafeteria	13.5	–	–
Classrooms only	–	–	–
Other	–	–	–
Theatre is not taught.	–	–	–

NOTE: – Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.21 Standard Errors for Teachers' Reports on Whether They Have a Teaching Certificate in Theatre for the Targeted Student Sample

Do you have teaching certification in theatre that is recognized by the state in which you teach?	% Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Yes	12.3	4.6	2.3
No	12.0	16.4	4.9
Not offered in my state	–	–	–

NOTE: – Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.22 Standard Errors for Teachers' Reports on Whether They Have Spent Time in Theatre Professional Development Activities for the Targeted Student Sample

During the past five years, have you participated in professional development activities in any of the following areas, either in college or university course or in workshops?	% Students		Responding Scale Score (0-300)		Average Creating/ Performing Score (0-100%)	
	Yes	No, Other Activity	Yes	No, Other Activity	Yes	No, Other Activity
Filmmaking	6.5	10.8	27.4	4.9	4.4	2.4
Play Production	10.7	5.7	9.6	6.8	3.0	3.6
Technical Theatre	6.4	7.1	7.2	9.8	4.2	2.5
Design (e.g., sets, costumes, makeup, lighting)	6.5	6.9	6.5	11.0	3.9	2.3
Playwriting/screen writing	8.3	7.6	18.4	5.2	2.5	2.6
Acting	9.9	6.4	9.7	12.3	3.5	2.7
Directing	11.4	9.4	10.6	9.5	2.9	3.5
None	10.4	–	9.8	–	3.7	–

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.23 Standard Errors for Teachers' Reports on Whether They Get the Instructional Resources They Need for the Targeted Student Sample

Which of the following statements is true about how well your school system provides you with the instructional materials and other resources you need to teach your class?	% Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
I get all the resources I need.	7.6	–	–
I get most of the resources I need.	7.9	5.9	3.5
I get some of the resources I need.	10.2	7.3	2.5
I don't get any of the resources I need.	2.3	–	–

NOTE: – Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.24 Standard Errors for Teachers' Reports on Theatre Stage Facilities for the Targeted Student Sample

Which of the following describe(s) the stage facilities in your school?	% Students		Responding Scale Score (0-300)		Average Creating/ Performing Score (0-100%)	
	Yes	No	Yes	No	Yes	No
The stage has more than one curtain.	9.9	11.2	4.8	15.5	1.8	5.9
There is a sound system.	16.5	11.7	7.8	13.3	2.9	5.3
There are facilities for constructing scenery.	8.7	8.3	19.4	5.4	3.6	2.8
The stage has lighting and controls.	15.0	12.1	8.0	12.9	2.6	6.6
The stage has dressing rooms.	9.4	8.4	15.0	5.5	4.0	2.8
There is costume stock.	9.2	12.8	5.8	10.2	2.4	3.8
None	–	–	–	–	–	–

NOTE: – Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.25 Standard Errors for Teachers' Reports on Whether a Theatre Curriculum Specialist is Available for the Targeted Student Sample

Is there a curriculum specialist to help or advise you in theatre/drama?	% Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
Yes	10.7	15.1	5.8
No	10.7	5.0	1.6

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.26 Standard Errors for Teachers' Reports on the Place of Theatre in the Curriculum for the Targeted Student Sample

Which of the following statements describe(s) your theatre instruction?	% Students		Responding Scale Score (0-300)		Average Creating/ Performing Score (0-100%)	
	Yes	No	Yes	No	Yes	No
It is part of a K-12 curriculum.	10.3	14.0	12.0	6.7	3.1	2.1
It is part of a shorter but sequential theatre curriculum.	11.8	10.5	13.0	4.6	2.0	2.0
It is coordinated with or related to local, district, or state theatre standards.	8.1	9.1	5.7	11.1	2.4	2.9
It is integrated with other academic curriculum.	11.3	9.9	10.3	5.0	1.9	2.3
It is integrated with other arts curriculums.	8.9	11.9	7.9	7.1	2.1	2.1
It is part of the English/language arts curriculum.	7.1	10.3	–	5.7	–	1.9
None of the above	8.7	–	8.6	–	5.7	–

NOTE: – Standard errors cannot be accurately determined.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.27 Standard Errors for Teachers' Reports on the Match Between Their Theatre Instruction and National Standards

To what extent does your theatre instruction match the standards for theatre in the voluntary *National Standards for Arts Education?*	% Students	Responding Scale Score (0-300)	Average Creating/ Performing Score (0-100%)
There is a close match.	6.7	–	–
There is a moderate match.	7.9	6.9	2.5
There is a weak match.	–	–	–
I have not read the *Standards.*	8.8	6.6	2.7

NOTE: – Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

Table B7.28 Standard Errors for Teachers' Reports on How Often Their Students Engage in Theatre Instructional Activities for the Targeted Student Sample

How often do you ask students in this class to do the following?	Almost Every Day	Once or Twice a Week	Once or Twice a Month	Never or Hardly Ever
Create characters or scenes by improvisation				
Percentage of Students	11.0	10.6	8.8	–
Responding Scale Score	11.2	11.7	7.2	–
Average Creating/ Performing Score	6.2	2.4	1.6	–
Read a play aloud				
Percentage of Students	–	3.5	10.4	–
Responding Scale Score	–	21.0	3.9	–
Average Creating/ Performing Score	–	8.2	2.2	–
Write a play or scene				
Percentage of Students	–	7.8	13.3	11.9
Responding Scale Score	–	8.8	13.0	9.4
Average Creating/ Performing Score	–	6.6	4.1	2.3
Do technical aspects of theatre				
Percentage of Students	–	12.0	10.6	10.4
Responding Scale Score	–	15.1	11.9	6.3
Average Creating/ Performing Score	–	7.6	3.2	2.1
Perform for an audience				
Percentage of Students	9.6	6.9	8.9	–
Responding Scale Score	8.2	11.2	10.2	–
Average Creating/ Performing Score	5.0	4.4	2.9	–
Read about theatre				
Percentage of Students	–	4.7	11.2	12.9
Responding Scale Score	–	–	11.7	5.6
Average Creating/ Performing Score	–	–	4.1	2.1
Direct a play or scene				
Percentage of Students	–	4.0	11.2	10.6
Responding Scale Score	–	–	11.4	8.0
Average Creating/ Performing Score	–	–	4.8	2.4
Critique a play they have seen				
Percentage of Students	–	–	9.2	8.6
Responding Scale Score	–	–	7.2	8.4
Average Creating/ Performing Score	–	–	3.9	2.4

NOTE: – Standard errors cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1997 Arts Assessment.

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